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ABSTRACT

This guide is designed to assist fifth and sixth grade teachers who are basically following the New York State curricula. While an effort has been made to include ideas for teaching every concept found in the state's outline, additional concepts have been included for the benefit of those who might go beyond the outline, and for teachers in other states. The ideas are not presented as fully developed lesson plans; it is up to teachers to complete the plans to fit their environment. The material is divided into the following major categories: the problem of scarcity; making choices; factors of production; specialization, division of labor, and productivity; economic systems; money and banking; economic growth and development; international economics; and economic problems, including pollution, conservation, energy, labor and employment, unemployment and poverty, the economics of crime, and the farm problem. Each section begins with a brief discussion of the major economic concepts to be taught. Some sections contain lists of books, audio-visual material, computer software, and teaching guides useful in economics education. A 33-item bibliography of sources for the teaching of economics in the intermediate grades is included. (GEA)

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So, you have to teach economics...

in grades 5•6

George G. Dawson

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IDEAS FOR TEACHING ECONOMICS
IN
GRADES FIVE & SIX

by

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IDEAS FOR TEACHING ECONOMICS IN GRADES FIVE & SIX

Introduction -- A Note to the Teacher

The purpose of this guide is to assist fifth and sixth grade teachers who are basically following the New York State curricula. An effort has been made to include ideas for teaching every concept found in the State's outline. However, some additional concepts have been included for the benefit of those who might wish to go beyond the outline, and for teachers in other states.

Most of the ideas for activities and assignments have been "classroom tested." Indeed, most come from teachers who have taught in grades five or six. The ideas are not presented in the form of fully developed lesson plans. They take a variety of forms, ranging from "snippets" that can be incorporated into a portion of a daily lesson to projects that require several days to complete. The basic ideas are set forth briefly, so that the teacher can adapt them to a given classroom situation. That is, it is up to you to flesh them out. It is unlikely that any teacher will be able to use all of these suggested activities. Some are very simple, and would be suitable for students whose academic abilities are modest. A few may be complex and might best be used with pupils who are highly motivated and academically strong. Of course, you can modify any of the activities to suit your class or (in some cases) an individual student.

Major categories have been established for purposes of organizing the material, categories such as Making Choices and Money and Banking. Economic concepts relating to these categories are then underlined to enable you to locate a suggested activity relating to that concept without reading the whole page or paragraph. No effort has been made to specify the grade level for

each suggested activity. You can decide whether a particular idea is suitable for grade five or six, based upon the curriculum you are following or upon your own goals and objectives.

Each section begins with a brief discussion of the major economic concepts dealt with in that section. This is primarily for the benefit of the teacher who might be teaching economics for the first time or might need some "brushing up" on economic principles. The definitions are brief and simple. Those who feel the need for a more detailed explanation of any concept can consult a standard economics textbook or economics dictionary.

From time to time, you will find lists of books, audio-visual material, computer software, and teaching guides that might be of use in your teaching of economics. These lists are not exhaustive -- they often represent only a fraction of the items available. (Where prices are given, the prices were those in existence at the time this guide was being written. They are subject to change.)

Finally, the suggested ideas in this guide are only a few of the many strategies used by creative teachers. You may have better or newer ideas of your own. If so, we urge you to share them with others by submitting them to one of the annual awards programs for the teaching of economics. For information on the National Awards Program for the Teaching of Economics write to the Joint Council on Economic Education, 2 Park Ave., New York, N.Y. 10016. For information on the New York State program, write the New York State Council on Economic Education, Russell Sage College, Troy, N.Y. 12180. You may win up to $1000 in each program (the same project can be submitted to both programs), and the winning entries are usually published.

Good luck in your teaching of economics!

IDEAS FOR TEACHING ECONOMICS IN GRADES FIVE & SIX

Getting Started -- the Problem of Scarcity

Scarcity -- the fact that there are too few resources to provide people with all of their wants -- is the basic problem of economics. It affects practically every individual, family, community, and society. Thus, the concept of scracity should be the first subject taught in an economics program. Even if the students were introduced to the problem in earlier grades, it is important to review this problem. Some specific ideas for teaching this concept are as follows.

¶ Ask the students to list all of the things they would like to have. After they have completed their "Wants List", have them count the number of items. Devote a few minutes to discussing the kinds of things on the lists and the numbers of items. Now tell the pupils to go back over their lists and to put a check mark before the items that they could actually have right now. Ask the class why they can't have everything they want. The typical answer will be "Not enough money." Now explain that they all have the problem of scarcity, and write a definition of scarcity on the chalkboard.

¶ Ask the class to identify other areas in which scarcity exists. ("Can you think of other situations in which people want things but can't have them because their resources are too scarce?") Start with the school itself. Would they like to have a larger playground, a swimming pool, more athletic equipment, a better cafeteria? Discuss the reasons why it is impossible to have all of these things.

¶ Give an assignment in which the students are required to identify scarcity problems in their communities, towns, cities, counties, state, or nation. They may ask their parents or other adults, or they may look for articles in newspapers that show the problem of scarcity. For example, a local paper might report a shortage of police officers, a housing problem, the need for better health care facilities, etc.

¶ Create a situation in the classroom in which a scarcity problem becomes very evident. For example, you are going to make posters and need marking pens, but you have only six pens. Ask the students: "Who would like to have a marking pen?" There will be a scarcity of pens. This can lead to a discussion of how to deal with the problem. List the suggestions students give for allocating the marking pens. Examples might be: "First come, first served."(Traditional approach.) "Let the teacher decide." (Authoritarian approach.) "Let's discuss it and vote on it." (Democratic approach.) "Students should do something to earn the pens or be able to pay for them" (Market approach.) "Let's fight for them." (Might makes right -- an irrational approach, but one that reflects much of what happens in the world as nations contend for the earth's scarce resources.) A discussion of these responses can dramatize the scarcity problem and the difficulties we have in allocating scarce resources.

¶ To show that scarcity is a worldwide problem, examine the situations in other countries. You might start by asking the students to explain the significance of the popular song "We Are the World." Pictures that show the famine in parts of Africa, and extreme poverty in Asia and Latin America can be displayed. Assign students to select a country in which they are interested, do some library research, and find out how that country is affected by scarcity. Perhaps students whose parents or older siblings have visited other parts of the world can interview them to learn about scarcity elsewhere.

Making Choices

Because we can't have everything we want, we must make choices. Indeed, economics is sometimes defined as "the science of making choices." It is also defined as "the study of how we allocate scarce resources in trying to satisfy our wants." Another definition is: "The study of how goods and services are produced, distributed, and consumed." Many important economic concepts are related to choice-making.

¶ We all have needs and wants. To help children with their own choice-making, many teachers return to the list of wants that was written by each student in the first activity suggested under "Scarcity." Now the pupils can be asked to identify the wants that are really needs (things that are absolutely necessary, such as food, clothing, shelter, and medical care). Use the word wants to refer to things that are nice to have, but not absolutely necessary (candy, roller skates, games,and the like). You might arrange a bulletin board display of pictures of typical needs and wants, with a line down the middle to separate the two categories of goods and services. Have a class discussion of the needs and wants, and set priorities. Pupils can be asked to rank their lists from most important to least important. (Note that a particular item can be a need for one person but a luxury item, or a "want", for another. Ask students to give examples. For instance, a child with a paper route might need a bicycle, but for others the bicycle is a want.)

¶ After learning to distinguish between needs and wants, the students must learn the opportunity cost principle (also called real cost). This is one of the most important concepts in economics. The opportunity cost is what we sacrifice when we choose one thing instead of a desirable alternative. Example: Jim would like to have an audio-tape that costs $8.00. He would also like to have a baseball cap that costs $8.00. He has only $8.00 to spend, so he can't have both items. If he chooses the cap, the real cost is the sacrifice of the audio-tape. After explaining this principle to the class, ask the students to describe situations in which they have had to make such choices, and to identify the real, or opportunity, costs that were involved.

¶ As an assignment, have the students look for situations in which the opportunity cost principle is involved. These can be family experiences, community problems, or national issues. Examples: (1) Our family wanted new furniture, but also wanted to take a vacation trip that would cost about the same as the furniture. (2) There was a vacant lot in our village in the downtown area. A group of parents wanted the lot to be made into a park and playground, but business people wanted it to be a public parking lot. (3) The president wants to build an oil pipe line in

a wilderness area, but environmentalists are fighting to keep this area as a wild life preserve. Students should be asked to identify the opportunity costs in each situation. You might want to have a contest to see which student can find the greatest number of situations.

¶ Closely related to the principle of opportunity costs is the idea of trade-offs. A trade-off situation exists when you must give up a portion of one thing in order to have more of something else. For example, Erica enjoys watching several TV programs in the late afternoons and early evenings. She wants a newspaper delivery route, however, to earn money to buy a new tape recorder. She will have to trade-off some of her TV time to have the paper route. Introduce the class to the concept of trade-offs and have them identify experiences of their own that have involved trade-offs.

¶ Try to obtain the film series Trade-offs and show one or more of the films. These 20-minute films are aimed at children in the nine-to-thirteen year-old range. They are available as videocassettes or as 16-mm films. For information on price write the Agency for Instruction-Technology, Box A., Bloomington, IN 47402-0120. (You might be able to borrow some of the films from a center or council on economic education in your state.)

¶ Have the students review the "Wants Lists" they developed earlier. Ask them to develop priorities. Which of the items are most important to them? Introduce the concept of utility. Which ones would be most useful (provide the greatest utility) and give them the greatest satisfaction? Which ones would they be willing to trade-off in order to have more of some others?

¶ Go beyond the personal level and discuss trade-offs that must be made by schools, business firms, communities, states, and nations. For example, a school might decide to buy less athletic equipment to have more computers. A community with a rising crime rate might decide to reduce the number of fire fighters to have more police officers. You can ask the class to discuss the choices that are being made, whether or not they agree with those choices, and why.

¶ Discuss some national (or international) problems that involve trade-offs. For example, have pupils interview their parents to learn about the energy crises of a few years ago. As oil and gas became so expensive, what kinds of trade-offs did people have to make? (They did less driving, bought smaller cars, insulated their houses, set the thermostats lower, etc.) To increase our energy supplies, or to conserve existing sources, many trade-offs became necessary. Some of our explorations for more oil and gas damaged the environment -- we traded a clean environment for more energy.

¶ Set up role-playing situations involving decision-making and trade-offs. For example, some students play the roles of citizens who are concerned because a factory in the town is polluting the air and the

nearby river. Some want the factory to be shut down; others demand it be required to install pollution-control devices. Some pupils can act as factory employees who will lose their jobs if the factory must close down. One student can represent the factory's owners, who say that the pollution-control devices will raise production costs and thus force them to raise the price of their product. A few pupils can act as small business owners who rely upon the factory or its workers for their incomes. One or two youngsters should represent the town government, which will be concerned about losing the taxes the company pays, and losing an important part of the community's economic base. (Be sure to establish rules of conduct for the debates and discussions that will occur. Experience shows that the children can become very emotional during these sessions.) The class may not achieve an agreement on how to solve the problem, but they should learn that there are trade-offs in these matters, that public policy-making is complex, that everyone has a right to be heard, and that compromise is usually necessary.

¶ Teach the students how to use the decision-making grid when they have to make choices that involve trade-offs. An example of a simple grid follows:

	CRITERIA				
ALTERNATIVES	Income	Popularity	Pleasure	Safety	Grades
Study	0	0	-	+	+
Paper route	+	0	-	-	-
Football practice	-	+	+	-	-

Problem situation: Jack has 2 hours after school, and is trying to decide how to use this time. He is considering three alternatives: (1) He could study for 2 hours to improve his grades; (2) he could take a paper route to earn money; (3) he could go to football practice in the hope of making the school team. He establishes 5 criteria, based upon his short-term goals and values. How would each alternative affect each of the criteria? The symbol + means that the effect would be positive; the symbol - means negative; the symbol 0 means that there will be no effect. (A question mark can be used if he is uncertain about any item.) Study will have no effect on his immediate income or his popularity with his peers, so he places the 0 under these headings. Studying will reduce pleasure, so the - sign goes here. He will be safer when studying, so a + goes under "Safety." His grades will improve, so a + goes here. The paper route will increase his income, have no effect on his popularity, reduce his pleasure, be somewhat unsafe, and probably cause his grades to drop. (Note that some of the conclusions are debatable.) If he opts for

football practice, the effect on income is negative because he has to buy a helmet and other equipment. He thinks that he will become more popular with his peers, however, so he puts the plus sign in the "Popularity" column. He enjoys football, so there is a plus under the "Pleasure" heading. Football is dangerous, so there is a minus sign under "Safety." He fears that his grades will decline further if he concentrates on sports, so the - sign goes here. Jack now has a systematic way of examining the probable results of the various alternatives. The grid can't make the decision for him, but at least he will be able to make an informed decision. For more details on using this grid, see Teaching Strategies: Consumer Economics (Secondary) by Robert Ristau, et. al. (New York: Joint Council on Economic Education, 1985) pp. 4-8. Use the blank grid below, or develop your own version. Note that students faced with similar problems may list different alternatives and have different criteria; thus the grid can be individualized and personalized.

ALTERNATIVES	CRITERIA					

Symbols: ++ Very positive effect on the criterion.
+ Positive effect on the criterion.
- Negative effect on the criterion.
-- Very negative effect on the criterion.
0 No effect.
? Effect is uncertain.

STATEMENT OF THE PROBLEM OR SITUATION: _____

_____

PERSON OR PERSONS INVOLVED: _____

_____

¶ You can teach some consumer economics by asking the students to prepare imaginary family budgets. Tell them that they have a specific number of dollars available and that they have to plan a family budget for one month. They must distinguish between the family's needs and wants, establish priorities, and decide what to trade off. They can do this as an individual assignment, or you can have them work in pairs or as teams. Some teachers have girl/boy teams acting as married couples. Some give this assignment every month, but introduce new problems and situations that the consumer must face. The problems can be written on index cards, placed in a stack, and drawn at random. They can include such things as an automobile accident, an illness in the family, the need for emergency plumbing repairs, or other events that will cost money and force the students to revise their budgets. To make it more interesting, include some cards with positive events, such as an unexpected tax refund or a bonus from an employer.

The Factors of Production

The inputs or factors of production are the things that go into an enterprise to create the outputs of goods and services. They are: (1) natural resources, such as soil, water, minerals, and timber -- things provided by nature (sometimes simply called "land"); (2) labor, or all productive human effort, ranging from unskilled workers to intellectuals with Ph.D. degrees; (3) capital, which is human-made goods used to produce other goods and services (tools, machines, trucks, equipment, mines, factories, and office buildings are examples of capital); and (4) enterprise, represented by the people who assume the risks and responsibilities of starting a business and bringing the other three factors together. A nation's standard of living depends largely on the quantity and quality of these factors of production, and the efficiency with which they are employed. These are the elements in our economy that are working to deal with the problem of scarcity.

¶ List the factors of production on the chalk board with simple definitions. Ask the students to give examples of each. As an assignment, ask them to identify examples of the factors of production in their own communities. They can include members of their own families, or things in their own homes. (For example, mother is an accountant who helps people with their taxes. She can be called part of our labor force, even if she is self-employed; but she might also be an entrepreneur if she runs her own business. Her typewriter, calculator, and personal computer constitute capital equipment.) Have pupils briefly report the results of their surveys to the class, and open a discussion of those results. Note that an item that is a consumer good for one person can be a capital item for another. For example, Jim's wagon is used only for pleasure, so it is a consumer good; Jane's wagon is used to deliver papers, so it is a capital item for her.

¶ Arrange a bulletin-board display of the factors of production. Have the students bring in pictures of workers (be sure to include those who produce services, such as nurses and singers, as well as those who produce goods), natural resources, capital goods, and entrepreneurs. Students might also draw pictures of the various factors of production.

¶ Study a particular business or project in your area, and have the pupils identify the factors of production being used there. For example, if a house or other building is being constructed nearby, visit the site (or ask students to try to visit it) and note how labor, raw materials, and capital goods are being brought together to create the building. Discuss the observations in class, and ask the students to try to explain how enterprise contributes to the project. Students with cameras might take photographs that you can display in the classroom.

¶ For a somewhat challenging assignment, have the students consider their own career plans. What do they want to be when they grow up? Will they be considered labor? Will they be entrepreneurs? Both, perhaps? How will they relate to the factors of production? For example, a pupil who wants to be a farmer or to work in a wild-life park will be directly involved with natural resources, but will also use capital items such as trucks, tractors, and various tools. A carpenter will use capital items (saws, hammers, drills, etc.) and natural resources (wood and water), and may rely upon entrepreneurs who create the businesses or projects that require his or her services.

¶ When studying other parts of the world, have students select nations that interest them and learn how the factors of production are used in those nations. What natural resources does the nation have? Does it have a large labor force? Does it have the kind of sophisticated capital equipment found in the United States, Canada, Japan, and other advanced industrial nations? Pictures of conditions in other lands can be displayed in the classroom. For example, magazine pictures of workers in China doing things that are normally done by machines in the United States can be used to initiate a discussion of how the factors of production are used in different countries. (Ask such questions as: "Does this help to explain why Americans have a higher level of living? Why?")

¶ Consider the possibility of a classroom company. (This will be discussed in more detail later.) Tell the students that you are thinking of establishing an enterprise in the classroom. What goods or services would they want to produce? What factors of production would they need? How would they be used?

¶ If you are also teaching history, ask the students to note the roles played by the factors of production in our nation's development. Why were natural resources important? Why is it important to conserve our natural resources? How did labor help to build America? How did capital help bring about economic growth? (Perhaps the railroads are the best example of how a capital item helped our economy to grow.)

¶ Ask the students to identify the ways in which they and their families use the various factors of production. What labor do they use, such as electricians, plumbers, and painters? What capital items exist in or around the home? (Note that a privately owned house is considered to be a capital item.) What natural resources do they use? How do they rely upon entrepreneurs?

Specialization, Division of Labor, and Productivity

To help cope with the problem of scarcity, people should find ways of increasing productivity -- the amount of output we get from a given unit of input. Productivity is often measured in terms of the amount (or money value) of output obtained from one unit of labor, such as an hour of labor. If a worker produced 10 gadgets last year, but turns out 12 gadgets per hour this year, that worker's productivity has increased by 20 percent. We can increase productivity by using more and better capital equipment, training and educating our workers, keeping worker morale high, and employing efficient management techniques. Specialization and division of labor have increased productivity. A person who tries to do everything himself/herself will often do everything inefficiently. It is better to specialize, learning to do one task (or a few things) very well, while others specialize in different tasks. Thus, we become more productive, and we can produce enough to meet our own needs as well as a surplus that we can trade for the surplus production of other specialists. Also, by dividing a task into several parts (division of labor) we can often increase the quantity and quality of our output. Each part can be completed by someone trained to specialize in that function.

¶ Explain the meaning of specialization, and ask the students to list the specialists who work in (or for) the school. People in the offices specialize in typing, filing, operating office machines, etc. Administrators specialize in school management. Some teachers specialize in one or a few subjects (physical education, art, music, etc.). Custodians specialize in repair and maintenance. You might compare the school with a one-room schoolhouse in which a single teacher was "the jack of all trades."

¶ Ask students to interview their parents and relatives regarding their specializations. In what ways do they specialize in the home? On the job? How do they rely upon other specialists? (This introduces the concept of interdependence.)

¶ To show how specialization and division of labor increase productivity, conduct an experiment in the classroom. Tell the class that they are going to produce small note pads. Give each student a supply of plain white paper (letter size) and some paper clips. Demonstrate the steps they will take. These are:

1. Fold the sheet of paper in half.
2. Then fold it again, making sharp creases.
3. Carefully tear the paper along the creases so that you have four small sheets of equal size.
4. Assemble the four small sheets and attach them with a paper clip in one corner.
5. Print the word "NOTES" on the top of the first small sheet.

Have each pupil make one note pad to be sure they understand the procedure. Now divide the class into two groups. Group #1, the "Controls," will work indpendently as individuals. That is, each child will do all of the five tasks needed to make the note pads. In group #2, the "Experimentals," the students will divide the work and specialize. They

can form "production teams" of five students per team. One student in a team will specialize in Step #1; a second in Step #2, and so on. Assemblylines can be formed so that the work flows smoothly from one specialist to another. Give the students a couple of minutes to get organized and to practice their tasks; then set a time limit for the experiment (10 minutes, or so). They will start when you give them the signal to do so, and stop when you command them to stop. Then count the output of the two groups. Invariably, the "Experimentals" will produce more note pads, and the pads will be of higher quality.

You can carry this activity further and show the importance of capital. The capital goods will be scissors and a stapler. Let one of the work teams have these items, so that they can cut the sheets instead of tearing them, and use the stapler instead of paper clips to attach them. Now let this team "race" another team that does not have these tools. It should become clear that the introduction of better tools can increase productivity and result in a better product. (Do not let the paper used in these experiments go to waste. Collect the note pads and use them, or allow the students to use them.)

¶ If you are going to establish a classroom business, use specialization and division of labor to produce goods or services. Many teachers have the students produce cookies. Such things as mixing the ingredients and baking the cookies can create problems. To avoid this, buy boxes of plain vanilla wafers, jars of peanut butter, and jars of jam. The idea is to make "sandwich" type cookies, using these items. Place a supply of wafers on a tray, with the flat side up. With a table knife, spread some peanut butter on each wafer. Then spread a little jam on top of the peanut butter. Cover each with another wafer to create the finished "sandwich" cookie. If you did not use the experiment suggested immediately above to teach about specialization, you can conduct a similar experiment with the cookies. Have half the pupils work independently, so that each child performs all of the steps. The others will specialize and divide the labor, and this will usually result in greater output.

¶ Arrange a visit to the school cafeteria, as part of a study of how specialization and division of labor are used to produce meals. The students should observe the cafeteria workers in action, and interview them. Back in the classroom, discuss their findings and ask them to identify other specialists who helped to provide the meals, directly or indirectly. (Consider the farmers who grew the crops or provided meat and milk; food processing companies; truck drivers who delivered the food; government inspectors; dieticians who planned the meals; and others.) You can also review your study of the factors of production by asking the class to show how each factor was involved in providing them with meals. For variations of this activity, have the pupils describe the production of their Thanksgiving dinners or of some product that they own. (What specialists and what factors of production were used in producing your bicycle, your TV set,your shoes, your records and audio-tapes?)

¶ Have each pupil select a business, an organization, or a profession that he or she finds interesting and learn how specialization, division of labor, and the factors of production are used therein.

¶ Ask the students to do library research to learn how Eli Whitney used specialization and division of labor when he developed the interchangeable parts system in making guns for the army, and how Henry Ford used these principles when he developed assembly line production of automobiles.

¶ The concept of specialization can be related to geography lessons by having the pupils identify the economic activities that various regions specialize in doing. In what way does your own region or community specialize? (To learn how to categorize the economy of a region or community, see "Studying Your Region's Economy" by George Dawson, Chapter 41 in The Economy of New York State, edited by Sanford D. Gordon; published by South-Western Publishing Co., Cincinnati, Ohio, 1987.) Note that nations also specialize. In studying other countries they should learn how those countries specialize in producing particular goods or services, how we use their output, how they rely upon some of the things that we specialize in, and how we are interdependent.

Economic Systems

Because every society faces the problem of scarcity, every society must try to develop a system to answer the basic economic questions: (1) What should we produce? (2) How shall we product it? (3) For whom? We can identify three types of economic systems, which are as follows:

§Traditional economy -- looks to the past to answer the questions. "We will produce sheep and goats because this is what we have always done." "We will use human labor. Our ancestors did not use machines, so why should we?" "For whom are we producing? The people of noble blood will get most; the lower caste people will get least."

§Command economy -- relies upon authority. The government will decide what to produce, how to produce it, and how to distribute it.

§Market economy -- individuals and businesses make their own decisions on what to produce, how to produce it, and how to distribute it. Government plays no role, except to keep the peace, defend the nation, and protect private property. Consumers guide production, because business will produce only what they want and can afford to buy. Driven by the desire for profit, business will use methods that are efficient. The answer to the question "For whom?" is that the goods and services will go to those who are able to pay for them.

In reality, practically all economies are mixed. That is, they contain elements of all three systems. However, the element that is dominant will usually be used to describe the nation's economy. Thus, our economy is usually called a market economy, even though it has elements of tradition and command.

Some prefer to use the terms communism, socialism, and capitalism to categorize economic systems. These terms are often confused with political or governmental systems, however, and this can baffle students.

In theory, any economic system can co-exist with any political system. The political systems are: (1) Dictatorship or monarchy (rule of one person); (2) oligarchy (rule of a few); (3) and democracy (rule of many, or rule by the people). Some European nations are considered to be democracies, even though their economic systems are called "socialist." A nation with a capitalist economy is not necessarily a political democracy, although this is the situation in the United States. If you do choose to use these terms, the following definitions are suggested:

§Communism -- Goods and services are collectively produced, collectively distributed, and collectively consumed. The means of production are owned and controlled by government. The basic economic questions are answered by government authorities. Very similar to the command economy.

§Socialism -- Major means of production are owned and/or controlled by government. Some enterprises are privately owned, and many goods are privately rather than collectively consumed. (There are many different degrees and forms of socialism, so it is hard to define.)

§Capitalism -- Goods and services are privately produced, privately distributed, and privately consumed. The means of production are privately owned. Practically the same as the market system.

¶ After giving the class brief and simple definitions of the terms traditional, command, and market as economic systems, show the film "Return to Mocha." Using cartoons and rock music, the film illustrates the three systems through an amusing story. It also shows how the three fictional island-nations develop trade with one another. (To borrow the film, write Video Outreach, c/o JN Company, Box 1199, Melville, New York 11747. It is available in ½-inch VHS and in 3/4-inch. A teacher's guide should be included. You might also try to obtain the film from the Council or Center for Economic Education in your region.) In a follow-up discussion, ask the students to identify the characteristics of the three systems.

¶ After the students have learned the characteristics of the three types of economic systems, ask them to identify countries (past or present) that seem to illustrate each system. Point out that most nations have mixed economies, but that one system is usually predominant. Examples might include some poor nations in Africa (such as Somalia) as being largely traditional, Maoist China and Stalinist Russia as command economies, and the United States and West Germany as market economies. You might also assign different countries to the students, asking them to learn about their economies and decide which type of system they have.

¶ Divide the class into three groups, each group representing a different economic system. Present the groups with an economic problem and have them present the solution that would be consistent with the system that each group represents. For example: "Thousands of students are finishing school this year and want jobs. How would your economic system deal with this?" (In the traditional economy they will probably do the same type of work that their parents do. In the command economy, the government will probably decide what they are to do. In the market

economy the students can try for any job that interests them; but they will succeed only if there is a demand for people in that field and if they are well prepared for that line of work.) Have the class discuss the pros and cons of each solution.

¶ After it is clear that the students have a good understanding of each system, ask them to identify elements in our society that are traditional, command, and market. For example, there is a great increase in retail buying in December, not because our needs have increased, but because of the tradition of giving gifts at Christmas time. During many holidays we close stores, factories, banks, offices, schools, and even government agencies because of traditions. Some traditions are bad for our economy. For instance, women have been prevented from taking jobs in certain fields because the occupations are traditionally male. (This is not only unfair to women, it harms the total economy because we are not permitting women to produce as much as they could be producing.) For examples of command, the government requires that all children of a certain age go to school, and that nearly everyone who earns an income pay taxes. The government decides where and how to build roads, bridges, tunnels, etc. In spite of these examples of tradition and command, however, ours is overwhelmingly a market economy. For instance, if a student owns a portable radio, he or she obtained it from a privately owned business. Consumer demand, not a government decree, caused the manufacturer to make the radio and the retailer to sell it. The price was determined by production costs and the interaction of supply and demand, not by the government.

¶ Check local libraries for books that deal with economic systems, and that are written at the 5th and 6th grade levels. Some of these are:

Horse in Your Back Yard by Virginia Phelps Clemens. Philadelphia: The Westminster Press, 1977. (Relates economic freedom to the consumer's decision to satisfy wants. Government involvement in the market is mentioned and explained.)

How Business Works by Edwin Hoag. New York: Bobbs-Merrill,1978. (Explains specialization, supply and demand, and the market.)

How A Market Economy Works by Marc Rosenblum. Minneapolis: Lerner Publications Co., 1970. (How the market allocates scarce resources.)

Life on Paradise Island by Harmon Wilson and Roman Warmke. Glenview, Ill.: Scott-Foresman, 1970. (How an economic system can evolve from a primitive to a more advanced state.)

The Toothpaste Millionaire by Jean Merrill. Burlington, Mass.: Houghton Mifflin, 1974. (How a sixth-grade entrepreneur succeeds in business. Market system. Economic freedom.)

Whistler in the Mist by Rosalie K. Fry. New York: Farrar, Straus & Giroux, 1968. (How different systems approach the problem of scarcity.)

For others see Learning Economics through Children's Stories, 4th and 5th editions, by Robert H. Hendricks, et. al. New York: Joint Council on Economic Education, 1982, and 1986.

¶ Show one or more of the filmstrips in the four-part set "Capitalism and Communism: Comparisons and Contrasts." Ask the students to list the differences between the two economic systems. Have a discussion on the question: "Which system would you prefer to live and work under, and why?" The four filmstrips come with cassettes and a teacher's guide. They are also available in the form of a VHS video tape. Produced by Guidance Associates in 1986, these filmstrips can be obtained from Social Studies School Service, P.O. Box 802, Culver City, Calif. 90232-0802. Price: $179 per set.

¶ Select a few students who are very good readers and who would be capable of making a good classroom presentation. Try to obtain the following books for them:

Capitalism: Opposing Viewpoints by Bruno Leone.

Socialism: Opposing Viewpoints by Bruno Leone.

Communism: Opposing Viewpoints by Bruno Leone.

The books were published by Greenhaven Press (revised editions, 1986) but are available from Social Studies School Service (address above) for $6.95 each. Assign one or two bright students to read one of the books and to summarize it for the class. These students should be prepared to answer questions posed by others in the class. After all three books have been summarized, hold a discussion on the question of which system the students would prefer to live and work under. When studying other countries, have the pupils try to decide which economic systems those countries have. (Many will have mixed economies, but try to determine if one system is predominant.)

¶ Try to obtain the film "Chickenomics" to help students understand the workings of the market economy. This is an amusing 24-minute film that illustrates private ownership of resources, consumer sovereignty, markets, and competition. Produced by World Research, Inc., the film is available from the Federal Reserve Banks of Boston, Richmond, and St. Louis. It can also be obtained in the form of 3/4" tape and ½" tape from the Federal Reserve Bank of Richmond. Addresses of banks:

FRB Boston
Bank & Public Services Dept.
600 Atlantic Ave.
Boston, MA 02106
(617) 973-3459

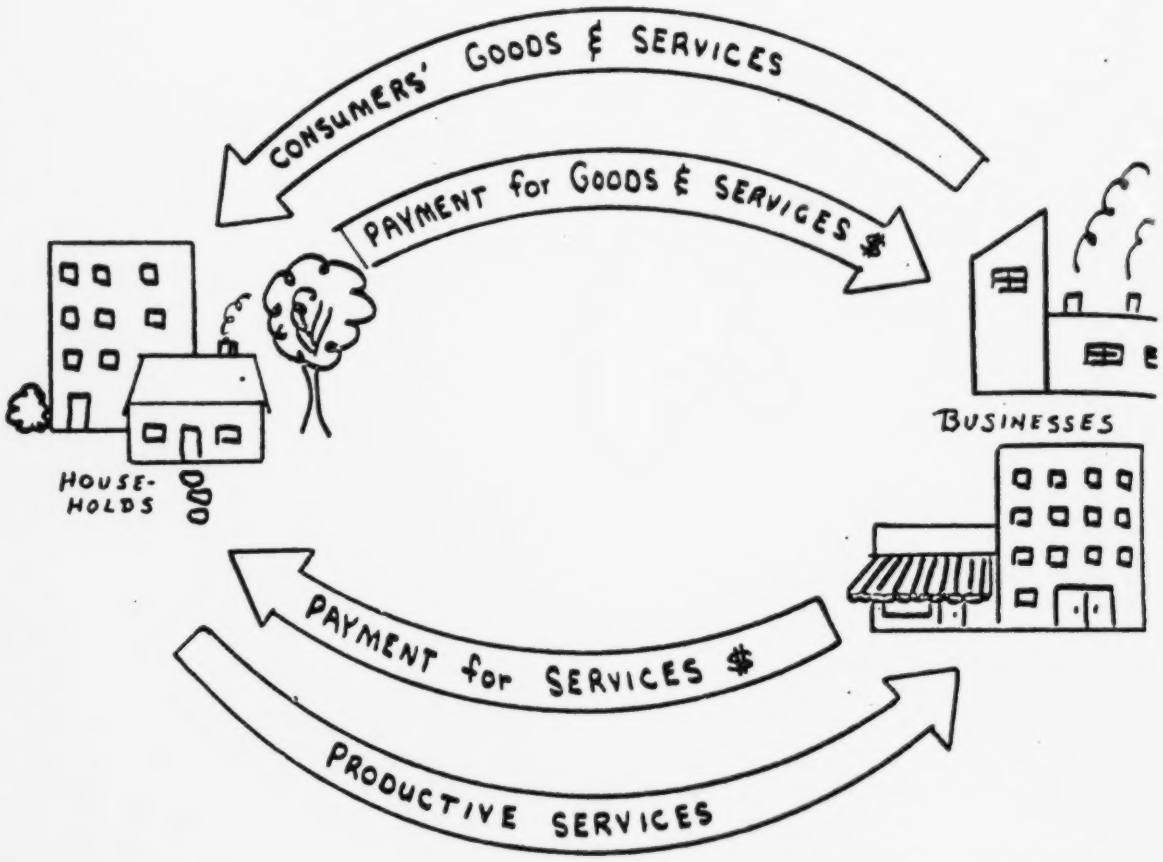
FRB Richmond
Public Services Dept.
P.O. Box 27622
Richmond, VA 23261
(804) 643-1250

FRB ST. Louis
Bank Relations & Public Information Dept.
P.O. Box 442
St. Louis, MO 63166
(314) 444-8421

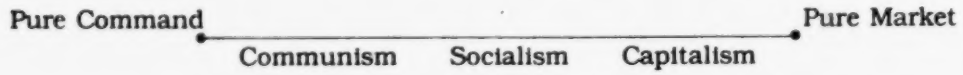
For a catalog of Federal Reserve materials, write to the Federal Reserve Bank of N.Y., Public Information Dept., 33 Liberty St., New York, N.Y. 10045, or call (212) 791-6134. Ask for: Federal Reserve System Public Information Materials, latest issue.

Write the Federal Reserve Bank of Chicago, Public Information Center, P.O. Box 834, Chicago, IL 60690 (or call 312-322-5112) for a copy of Elementary Economics: A Bibliography.

¶ Introduce the class to the simple flow chart below. Explain that the arrow at the top represents things that they and their families buy from businesses, and ask for a few examples of goods and services that they typically purchase. Explain that the second arrow shows their payments of money to businesses. The third arrow represents wages, salaries, fees, etc., that businesses pay to people from whom they obtain services. Ask for a few examples of the kinds of services their families provide to businesses. (Workers provide labor; lawyers provide legal advice; etc.) Ask students to explain how the chart shows interdependence in our economy. Have the pupils make large posters based upon this flow chart. Encourage them to embellish the chart by adding drawings or "cut-out" pictures to illustrate the goods and services that consumers buy, and the types of services that people provide to businesses. Point out that something is missing from the charts, and try to get the class to tell what it is -- government's role. After a discussion of some of the things we get from government (schools, parks, police protection, roads, etc.) and of how these are paid for (taxes and, in some cases, user fees) ask the students to add government to the charts. A picture or drawing representing government could appear in the center of the chart, with arrows going to households and to businesses to show the government services that they get; and with arrows going back toward government to represent taxes and user fees.



¶ Obtain copies of the colorful chart "What's the Difference?" from the National Federation of Independent Business, Research and Education Foundation, 150 West 20th Ave., San Mateo, Calif. 94403. The chart lists many products and services used by the typical consumer, and shows the amount of time that the average manufacturing employee must work to earn the money to buy them. The time that an American in Washington, D.C., must work is compared with the times for workers in Moscow, London, Paris, and Munich. In most cases the American worker has the advantage. For example, the Russian worker must work nearly three times as long as the American for the same basket of food items. In addition to comparing standards of living, this chart can give students another perspective on real cost. One way of measuring real cost is to compute the amount of time one had to work to be able to buy an item. A teacher's guide comes with the charts, giving ideas on teaching comparative economic systems. The guide suggests the use of the following diagram. When studying a particular country, the students should try to decide where, on the continuum, that country ought to be placed.



After analyzing the data on the chart, you might ask the class why the standard of living in the United States is higher than that of most other nations. It might be noted, however, that America's lead is being challenged by other nations. The cartoon suggests one possible reason. While others study scientific subjects, we play games!

¶ To teach about business in our economy, and many related economic concepts, many teachers establish a classroom company. The students establish and operate an enterprise, produce goods or services, and sell their output. Before undertaking this activity, be sure to consult the administration. Parents ought to be informed as well. There are many different variations on this activity, and it can be as simple or as complex as you choose to make it. We shall outline a very detailed and somewhat complex project, but you are free to omit some of these steps if they are not feasible in your situation, or if you lack the time or resources for them.

1. Discuss the project with the class, asking for suggestions for goods or services they would like to produce. List these on the chalkboard, and reduce the final list to four or five items.

2. Prepare a simple market survey to be administered in the school, or wherever the students expect to sell their output. This will show the importance of consumer demand in determining what is to be produced in a market economy. It is best to confine your market to people in the school and parents. The survey should ask a sample of the target market which products they would buy and, possibly, how much they would be willing to pay for each.

3. Once a decision has been made on a product (or products), make a list of the inputs -- the things that will be needed to produce it. Estimate the production costs. Divide the total estimated cost by the number of items you plan to produce to obtain an estimate of the unit cost (cost for each item produced).

4. Raise the money that will be needed. You might form a corporation and sell stock. Perhaps the students could design the stock certificates during art lessons. Also have them decide upon a name for the company. Be sure the students understand that people who buy stock (which should include class members) will be entitled to a share of the profits, if any. The possibility that there might be losses should be understood. Considering borrowing money, local bankers sometimes cooperate by letting the "company" open an account and obtain a loan. (More often, the account will be opened in the teacher's name. Be sure that your students trust you!) If a bank loan is not feasible, you or an administrator might play the role of "commercial bank" and provide the loan. Charge interest at the current rate.

5. When funds have been raised, have the students do comparison shopping to obtain the needed supplies. Be sure that you have a good system of accounting and that careful records are kept of all expenditures. All documents and all money must be stored in a safe place.

6. Arrange an appropriate work space. If this is in the school (even if it is in your classroom), inform the students that they must pay rent. The same applies to any school equipment that they use.

7. Elect company officials, such as president, vice presidents, and treasurer. All who bought stock should have a vote. Develop a list of tasks and responsibilities for each official.

8. Analyze the job to be done and decide upon production methods. You

might even draw a flow chart, which shows every step in the process. Use assembly-lines in which the "workers" will specialize.

9. Prepare a simple job application form and have the students apply for the jobs that they want. If conflicts occur because too many apply for a particular job, discuss ways of resolving the problem. Explain that the wage rate may drop for occupations in which there is a surplus of workers, and rise for occupations that draw too few applicants -- that's how the market system works! (You might permit job rotation, however, so that workers with unpopular tasks get a chance to do some of the more attractive jobs.)

10. Set up your production lines and have a "trial run" to see if your production method is effective. If you are producing an item that is edible, ask the school nurse or dietician to inspect your "plant" to be sure that there are no unsanitary conditions. This will help students understand one of the roles played by government in our economy.

11. When production is under way, have someone act as quality control manager, inspecting each item to see that it has no flaws. Keep records of the time each "worker" spends on the job. You might have a personnel manager (a student) do this.

12. Plan an advertising campaign. Students can design posters and write "commercials" to be broadcast on the school's p.a. system. If there is a school newspaper, they can write advertising copy.

13. Sell the company's output, having the students act as salespersons. Be sure that they learn to keep accurate records of all sales. If they fail to sell everything at the original price, consider having special sales and cutting the prices. (This could show that a surplus of supply can cause prices to fall.)

14. When all the firm's revenues are in, pay all the costs of production that remain (wages of workers, for example), and determine how much of a profit was made. Stockholders can now redeem their shares for their face value, plus a dividend. Acting as company directors, the students might decide to use some of the profits for a worthy cause. Consider purchasing equipment for the classroom, taking a trip to an historic site, contributing to a charity, or even investing the money in a new classroom enterprise. Be sure the students understand that in real life they would have to pay certain business taxes as well as personal taxes on their wages or shares of the profits.

15. Conclude with some sort of culminating activity that summarizes the learnings obtained through the experience. A presentation at an assembly program is one possibility. Articles can be written by the students and submitted to local papers or the school paper. A large scrap book can be made, containing photographs of the activities and step-by-step descriptions of the project. This could be a valuable resource for other classes that might want to try a similar project. An "official report" can be prepared for the stockholders and any other interested person who cooperated in any way. Letters of thanks should be written to all who helped.

For a fairly detailed account of a project of this type, see "The Cool Card Company" in Strategies for Teaching Economics: Intermediate Level

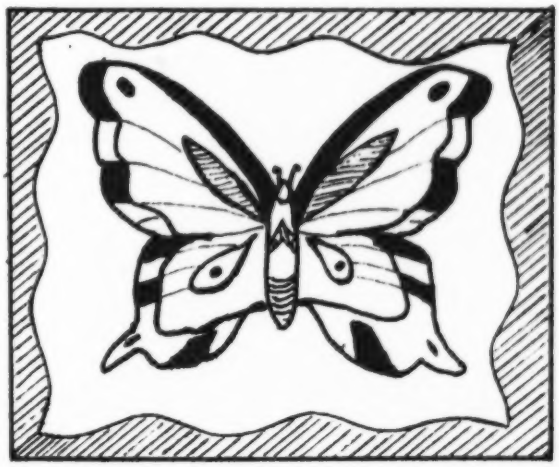
(Grades 4-6) by Marilyn Kourilsky, et. al. (New York: Joint Council on Economic Education, 1978), pp. 72-79. Also see the annually published booklet Economic Education Experiences of Enterprising Teachers (New York: Joint Council on Economic Education), Chapter 2, which invariably contains many accounts of classroom companies. Some projects involve fairly complex items, such as dolls, Christmas tree ornaments, or stuffed toy animals; but many are quite simple to make. Avoid the type of product that might involve some danger to the students, such as metal objects with sharp edges, or food items requiring the use of sharp knives or hot stoves. An example of a product that is easy to make, inexpensive, and popular with consumers is the small gift tag or note card. To make them you will need old greeting cards, 3x5" index cards, scissors, and glue. Proceed as follows:

- Have the students bring in old greeting cards, such as Christmas cards, Easter cards, valentines, and birthday cards.
- Obtain a supply of 3x5" unlined index cards. Try to get them in a variety of colors -- light blue, pink, yellow, etc.
- Have the students identify portions of the old greeting cards that can be cut out and pasted on the index cards, such as a flower, an animal, or a child. Sometimes you can get several from one card.
- Fold the index cards in half, making a sharp crease.
- Using a folded card to gauge the appropriate size of the "cut-out," have the pupils cut out the portions of the greeting cards that are to be attached to the index cards. (Pinking shears will help them avoid the problem of cutting straight lines; or they can cut in wave-like patterns as,in the drawing that follows.)
- Paste the "cut-out" on one side of a folded index card. The finished products can be packed in cellophane baggies and sold by the dozen, or whatever number you choose.

When folded in half, the 3x5" index card will be this size.

A few drops of glue on the card or on the back of the cut-out will suffice to attach the cut-out.

For the card shown on the right the opening is at the bottom. A short message or greeting can be written on the inside by the user of the card.



¶ Many elementary school teachers are using the "mini-society" to show children how our economic system works. The classroom becomes a self-contained economic system. (Some also establish a political system by having the students write a constitution, set up a government, elect officials, and adopt laws.) A classroom currency is created, and at least one bank is established. Students establish various businesses and try to sell their products and services. They may hire other students to work for them. Once things are well under way, the teacher does not direct most of the activities, although he or she may act as a "consultant" to any student or a company. Some firms will succeed; others may fail. Workers will sometimes quit and set up their own companies, even competing with their former employers. Prices will rise or fall in accordance with supply and demand. For a detailed explanation of this approach see Mini-Society: Experiencing Real-World Economics in the Elementary School Classroom by Marilyn Kourilsky (Reading, Mass.: Addison-Wesley, 1983.) A shorter account appears in Strategies for Teaching Economics: Intermediate Level (Grades 4-6) by Marilyn Kourilsky, et. al. (New York: Joint Council on Economic Education, 1978), Part III.

¶ To teach the law of demand hold a mock auction. Display something of interest to the students, such as a portable radio. Distribute small slips of paper and ask them to write down the highest price they would be willing to pay for the radio. (To simplify the computations, have them use five-dollar intervals -- $5, $10, $15, etc.) Collect the slips and arrange them in order from the highest to lowest bids. Put a demand schedule on the chalk board, and have the students copy it in their notebooks or on a sheet of paper. The resulting table should be something like this:

Price	Quantity Demanded*
$30	1
$25	3
$20	7
$15	12
$10	17
$5	30

Try to get students to interpret the result -- as price goes down, the quantity sold goes up; as price goes up, the quantity sold will go down. This is the law of demand. Discuss the implications of the demand schedule for a business person selling radios. What can he or she learn from it? For example, which price would bring in the highest revenue (income)? Have the students answer this question by multiplying each price by the quantity that would be demanded at that price. In the example above, the seller will maximize revenue by charging $15. (Note, however, that this is not necessarily the price that will be charged, because of competition. If other sellers are charging lower prices for the same product, you may have to accept the lower price as well. In short, you must also consider the total market supply.)

*[Be sure to explain that the figures in this column show the numbers

of items that would sold at each price, not the number of students who specified that price. In this case, one student offered $30, so the quantity demand (Q) would be 1; two students offered $25, so we add the one who offered $30 to give the total Q of 3. This is because the person who offered $30 would certainly be willing to buy the radio if the price were $25. Four students offered $20, so we add the previous 3 to that number to get 7 -- the number who would certainly buy a radio if the price were $20. And so on down the line, until we reach $5 -- the price at which all 30 students would buy a radio.]

¶ To teach the concept of supply and demand have the students list our major holidays, such as Christmas, Valentines Day, Easter, and Mother's Day -- holidays when gifts are given. Ask them to indicate the types of goods that are usually purchased for those holidays. As each holiday approaches, the prices usually rise. The prices often drop sharply as soon as the holiday ends. Discuss the reasons for the price changes. For example, Christmas cards can be bought at 50% discounts after Christmas because the sellers still have a supply, but the demand has dropped. Have the students note how they can save money by their knowledge of the laws of supply and demand. (Buy Christmas cards on December 26 and save them for next year. As the summer is ending, buy bathing suits, etc., for next summer. Try to go to the movies during the day when tickets are usually cheaper than they are in the evening.) For interesting activities to teach supply and demand (including the use of supply and demand curves), see Strategies for Teaching Economics: Intermediate Level (Grades 4-6) by Marilyn Kourilsky, et. al. (New York: Joint Council on Economic Education, 1978), pp. 27-44.

¶ To help students understand our free enterprise system, business, and corporate stocks, show the five filmstrips in the kit Disney's Wide World of Economics and Enterprise (Multi-media), 4-6 (500 South Buena Vista St., Burbank, Calif. 91521). Order from the Walt Disney Educational Media Co., at this address. Price: $169.00. The five film strips use cartoon characters. A game, 12 spirit masters, and a teacher's guide come with the set.

¶ To teach about business in the community, competition, productivity, taxes, and banks, use the video series "Community Business" available from WRI Education, 11722 Sorrento Valley Road, San Diego, Calif. 92121-1021. Designed for use in grades three through six, the eight programs (15 to 20 minutes each) use animal characters. The price of the set of video tapes is $376 ($47 for each video). The programs are also available on film strips for $199.

¶ To help students understand entrepreneurship, profits, and stocks, as well as other concepts related to business, use the film series Fergi Builds a Business. The price is $229 for the eight film strips with cassettes and teacher's guide. The films show young people starting a business to produce t-shirts. Order from: Walt Disney Educational Media Co., 10316 N.W. Prairie View Rd., Kansas City, MO 64153-9990.

Money and Banking

Money is probably the most widely used but least understood phenomenon in the world. It is important to understand that anything that people will accept and use as a medium of exchange is money, regardless of the form that it takes. Indeed, some economists assert that money is not a thing but a process. It is what money does, not what it is, that makes it money. Electronic fund transfer systems bring about payments by means of an electronic signal instead of by cash or checks, thus acting as a medium of exchange without having a tangible form. For a simple explanation, see the booklet Alice in Debitland: Consumer Protections and the Electronic Fund Transfer Act (Washington, D.C.: Board of Governors of the Federal Reserve System, 1980). Because children (and most adults) think of money as something tangible, however, it may be wise to omit the notion that money can be intangible. It should be understood that our money supply (as measured by the Federal Reserve) includes more than the coins and paper currency used by children. The narrowest definition of money (known as M-1) includes coins, paper currency, travelers checks, checking account balances and other checkable deposits. Checks are so widely used in our economy that these checkable deposits make up over 70% of our money supply, narrowly defined. The term "checkbook money" is used by many teachers to describe this form of money. Another fact that few people understand is that our banking system creates much of our money supply -- not by printing dollars or minting coins, but by creating the demand deposits that borrowers can draw upon by writing checks. The procedure by which this is effected, however, is probably too difficult for children to understand. It is enough for them to learn that banks do much more than provide a safe-keeping place for money. They must see that banks and other depository institutions (such as savings and loan associations and credit unions) act as intermediaries between those who have money to save and those who have too little and need to borrow. It is probable that many of the children are living in buildings that were purchased or built with loans from a bank or other depository institution.

¶ Plan a barter session in which the students will be able to exchange goods with one another. Ask them to bring in a limited number of things that they own and would like to trade. (It might be wise to apprise parents on this project so that children will not bring valuable items the parents want them to keep.) Make up a simple form upon which each student will record the items he or she wants to trade, and the items received in exchange for each object. Establish rules of conduct and set a time limit (20 minutes or so) for the bartering, and instruct the pupils in how to record their transactions on the forms. To expedite things, let each pupil announce in advance the items he or she brought to class. After the barter session is over, discuss the results and list the problems on the chalkboard. These usually include such things as: "I couldn't swap any of my things." "John wanted my catcher's mitt but we couldn't agree on the things he should give me for it." "Mary got twice as many things for her Cabbage Patch doll as I got for mine." "Everyone wanted my portable radio but nobody had enough things to give me for it." Then hold a discussion of how these problems could be avoided, arriving at the conclusion that using money would be better.

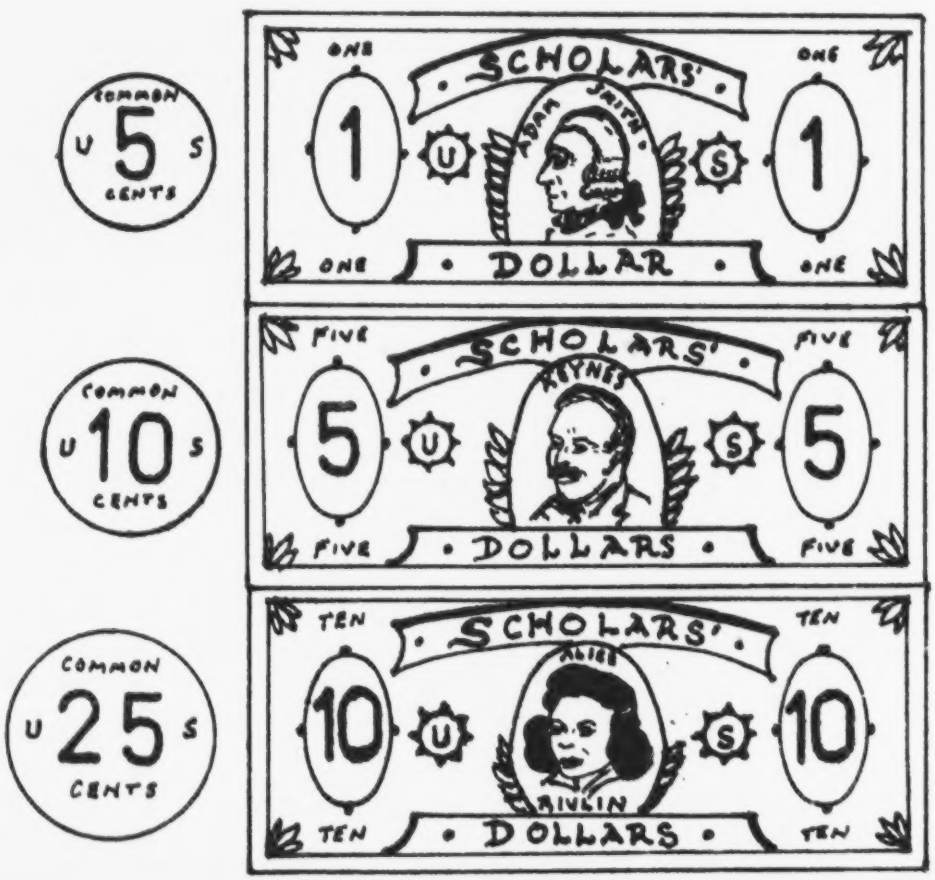
¶ Conduct a more general discussion of why money is more convenient than barter in our society. Ask such questions as: "Suppose we had no money and had to use barter. How would your parents pay the rent or make the mortgage payments?" "Jennifer's mother is a nurse and her father is a teacher. What problems would they have in paying for things at the supermarket?" "Bob's father is a fisherman. Would everyone from whom he wants goods and services be willing to accept fish in payment?" "Without money, how would you be able to save? The shoemaker might be able to save shoes that he made, but what would Bob's father and Jennifer's parents do?" "Suppose you wanted to go to a movie or a rock concert. What could you give to the theater owners in exchange for a ticket?" Finally, "How can the use of money avoid all of these problems?"

¶ To show that money can take many forms, have the students read the comic book The Story of Money (New York: Federal Reserve Bank, 1981) or look up "money" in an encyclopedia. Ask them to draw pictures of the kinds of things that have been used as money, such as fish-hooks, spears, cattle, beads, and other commodity money. Have a discussion of why these particular items might have been accepted as money, and of the problems associated with their use. (For example, a cow is valuable but must be fed and cared for, and it might become sick and die.) Then note that some of the early coins were shaped to represent commodities (such as the Chinese coins shaped like knives or spades), thus having less inherent value but becoming more convenient as a medium of exchange. Dis- the reasons why gold and silver became popular as coins (durable, relatively scarce, easily recognizable, accepted by everyone, etc.). End the discussion by asking: "Suppose that our classroom were a society, and that we needed something to use as money. What objects in this room might we decide to use -- chalk, pencils, pens? How well would these things work as money?" (Pens might be the best choice, because chalk and pencils wear out or become used up more quickly.)

¶ Having established that the use of commodities as money creates too many problems, move to a discussion of paper currency. Display several examples in the classroom -- a United States paper dollar, a dollar in play money, a foreign bank note. Ask: "If I owed you a dollar, which of these would you accept?" All will opt for the U.S. dollar. Ask for an explanation, using such questions as: "The play money has as much ink and paper as the U.S. dollar, so why do you prefer it?" The typical response is that the U.S. dollar was produced by our government. Follow this up with: "The foreign money was issued by a government too, so why wouldn't you accept it?" You will finally arrive at the point that acceptability is the most important characteristic of money, and that anything people are willing to accept can be used as money. Ask what other characteristics they think money should have. (Refer back to the desirable characteristics that the various commodity monies did not have.) It should be portable (easy to carry), easy to store, durable, recognizable as money, divisible (the major monetary unit can be broken down into smaller parts, such as cents), be fairly stable in value, and be hard to counterfeit. (How well does cattle meet these criteria?) The supply should be somewhat flexible, so that more money can be created when business and society need it. Summarize by asking

the students to evaluate United States money in terms of these criteria.

¶ Develop a currency to be used in the classroom. Play money could be used, but many teachers prefer to create their own. Some have the children design coins and paper bills, such as those shown below. Perhaps a small prize can be given to the pupil or pupils who produce the best designs. The "coins" can be cut from cardboard; the "bills" can be photo-copied. You can create as much "money" and as many different denominations as you wish. The money can be put into circulation by giving each student an equal amount, by "paying" students for various classroom chores, by rewarding good school work, etc. Within two or three days, the students will be using the classroom currency to buy and sell things from one another. Some teachers also set up a classroom store, selling pencils, pads, and other supplies. You can even charge "rent" to let a student use a piece of equipment or to use a pen or pencil. Set aside some time to discuss developments. Is the classroom currency "real money"? (Yes, in the context of that classroom.) How does it meet the criteria for money discussed earlier? Why isn't it generally accepted outside the classroom? (In some cases, teachers report that students in other classes will begin to use their money as well.) The problem of inflation can be introduced by increasing the supply of money faster than the supply of goods and services. When the pupils have more money they will offer higher prices for the goods. A general rise in prices (inflation) means that each dollar will buy less than before, and the value of money will decline.



¶ A classroom bank can be established, and could be used in conjunction with the classroom currency project. Have the students read The Story of Banks, a comic book published by the Federal Reserve Bank of New York, and/or Once Upon a Dime, another comic book produced by the New York Federal Reserve Bank. After they have learned what banks are and how they function, discuss how your own bank should be organized and operated. It might be set up as a corporation, with the students buying stock and thus providing the initial capital. The bank might offer checking accounts, savings accounts, and loans. Checkbooks can be designed, along with passbooks for savings accounts and forms for loan applications. A system for keeping accounts and records must be developed. Officers can be elected or appointed, and students can serve as loan officers, tellers, and the like. Perhaps a representative of a local bank (or a parent who is a bank employee) can visit the class and give advice. Students who borrow from the bank will pay interest; and those with savings accounts will receive interest. Stockholders will receive a share of the profits (if any). Through this activity, the children should learn the importance of being reliable, or paying one's debts, of keeping good financial records, etc. For additional ideas to teach money and banking, see Strategies for Teaching Economics: Intermediate Level (Grades 4-6 by Marilyn Kourilsky, et. al. (New York: The Joint Council on Economic Education, 1978), pp. 49-60.

¶ Make a study of the role that banks play in your community. Obtain brochures from local banks, and start a bulletin board display or scrap book on banking. Through pupil drawings, pictures from newspapers and magazines, and materials from the bank, show how consumers use banks and how businesses use them. Ask the pupils to write short papers on how they might use banks in the future, with such titles as "How I could get help in buying a car." "How a bank loan might help pay for my college education." "How a bank would help me buy a house." "How a bank could help me to start my own business." For a more challenging assignment, ask the students to write a story about an imaginary country that has no banks. The children might also be asked to interview parents, relatives, and other adults regarding their use of banks. If a building or some other construction project is under way in the area, ask the children to try to learn how banks might have helped to make this project possible.

¶ Try to obtain some of the following Federal Reserve materials to teach about money, credit, and banking.

§ Have You Heard? A unit on consumer credit for 5th grade. Includes a poster, 5 lesson plans, suggested activities, and teacher's guide. Federal Reserve Bank of New York, 33 Liberty St., New York, N.Y.10045.

§ Life of a Dollar Bill. A unit on how coins and paper currency get into circulation. Poster and short booklet. For 5th and 6th grades. Federal Reserve Bank of New York, 33 Liberty St., New York, N.Y. 10045.

§ The Road to Roota. Teacher's guide for use with comic book Wishes & Rainbows. Glossary of terms; suggested activities for elementary school teachers. Federal Reserve Bank of Boston, Public Services Dept., 600 Atlantic Ave., Boston, Mass. 02106.

§ Once Upon a Dime. Three filmstrips with cassettes, with comic book and teacher's guide. Deals with specialization, barter, coins, currency, checks, banks, central banking, and inflation. Aimed at 4th and 5th grade students. The set, which includes 35 copies of the comic book, costs $29.50. Available from the Federal Reserve Bank of New York, Public Information Dept., 33 Liberty St., New York, N.Y. 10045.

§ Chickenfeed. Explains money and inflation. Available in the form of 16 mm film (17 minutes), 3/4" tape, and ½" tape. Federal Reserve Bank of Richmond, Public Services Dept., P.O. Box 27622, Richmond, Va., 23261.

§ The Curious History of Money. A 16 mm film showing the evolution of money from barter to charge cards. Federal Reserve Bank of Boston, Public Services Dept., 600 Atlantic Ave., Boston, Mass. 02106, and the Federal Reserve Bank of Cleveland, Public Information Center, P.O. Box 6387, Cleveland, Ohio 44101.

§ You're the Banker. Simulation game in which players assume the roles of bankers deciding whether or not to extend loans. Use only with bright students. Costs $25.00. Federal Reserve Bank of Minneapolis, Office of Public Information, 250 Marquette Ave., Minneapolis, Minn. 55480.

§ Checking Out Checks. A six-minute film on how to write checks, how checks transfer money, and how to balance a checkbook. One 35 mm filmstrip with 35 copies of the comic book The Story of Checks and Electronic Payments, 4 activity masters, and one teacher's guide costs $12.50. Federal Reserve Bank of New York, Public Information Dept., 33 Liberty St., New York, N.Y. 10045.

For a complete list of material available from the Federal Reserve, write for a copy of the catalog Federal Reserve System Public Information Materials, Federal Reserve Bank of New York, Public Information Dept., 33 Liberty St., New York, N.Y. 10045.

¶ Show the film Why Money? from the Trade Offs series, Lesson 9. It shows why we use money, the main forms of money, and why checking accounts can be used as money. The teacher's guide suggests questions to be asked after the class has seen the film, as well as various activities to teach about barter and money. Produced by the Agency for Instructional Television, Box A, Bloomington, Indiana 47401. (You might be able to borrow a film from your nearest center or council on economic education.)

¶ Your local library may have one or more of the following children's books, dealing with money.

Brittain, Bill, All the Money in the World (New York:Harper & Row, 1979). Grades 3-6. Fiction. Story of a boy who gets all the money in the world, and how this causes his troubles.

Scott, Elaine, The Banking Book (New York: Frederick Warne & Co., 1981). Grades 4-6. History of banking. Bank services. How banks earn money. Laws that protect deposits.

Brown, Fern G., The Great Money Machine: How Your Bank Works (New York: Julian Messner, 1981). Grades 4-6. Various kinds of banks and what they do. History of banking in the U.S. Money. The Federal Reserve.

Kimley, April, Here Is Your Career--Banking, Money and Finance (New York: G.P. Putnam's Sons, 1976). Grade 6 and up. The banking industry and the jobs that it offers.

Shura, Mary F., Jefferson (New York: Dodd, Mead & Co., 1984). Fiction. Grades 4-6. When there isn't enough money for a birthday party, a boy's friends develop various money-making projects. Humorous.

James, Elizabeth, and Barkin, Carol, Managing Your Money (Milwaukee: Raintree Children's Books, 1977). Grades 4-6. Why money is necessary. Savings, checking accounts, credit cards, personal finance.

Elkin, Benjamin, Money (Chicago: Children's Press, 1983). Grades 3-5. Barter; money, the U.S. money system.

Morgan, Tom, Money, Money, Money: How to Get and Keep It. Grade 6 and up. (New York: G.P. Putnam's Sons, 1978). Loans, interest rates, bonds, checks, profits, inflation, bankruptcy.

Niegler, Sandra, Something for Sara (Elgin, Ill.: Child's World, 1977). Fiction. Possibly useful with poor readers and children whose primary language is Spanish. How to manage your money.

Barkin, Carol, and James, Elizabeth, Understanding Money (Milwaukee: Raintree Children's Books, 1977). Use with poor readers. Deals with values of U.S. money, how money is used, savings accounts, banks, and interest.

Ganz, David L., The World of Coins and Coin Collection. (New York: Charles Scribner's Sons, 1980). Grade 6. History of American currency. How to collect coins and paper money.

Seuling, Barbara, You Can't Count a Billion Dollars, and Other Little Known Facts About Money (New York: Doubleday, 1979). Grades 5-6. Facts about money.

Cavanna, Betty, You Can't Take Twenty Dogs on a Date (Philadelphia: Westminster, 1977). Grades 4-6. Fiction. A student opens a kennel to earn money. Sources of personal income, and the market forces that affect one's income.

Wade, William, From Barter to Banking (New York: Macmillan). Grades 5-6. History of money and banking. (May be out of print.)

Paradis, Adrian, Inflation in Action (New York: Julian Messner) Grade 6. Effects of rising prices. Value of money. (May be out of print.)

Less, Mary P., Money and Kids (Philadelphia: Westminster). Grade 6. Importance of money to children. (May be out of print.)

Rosenfeld, Sam, The Story of Coins (New York; Harvey House). Grade 6.

(Although the last four books listed may be out of print, it is possible that they can be found in libraries.)

You might ask children to read some of the books and give brief oral and/or written reports on them. They might also be asked to write short stories on money and banks, showing how children are involved.

¶ The problem of inflation can be taught by relating price changes to goods and services used by children. The following is a description of an actual lesson taught to a sixth grade class.

The teacher held up a well-known candy bar and asked: "How much does this cost?" The students said: "Fifty cents." The teacher (a man in his late 50s) asked: "How much do you think I paid for a candy bar like this when I was in the sixth grade?" None of the answers came close to the 1937 price of five cents. The pupils were astonished that the candy had cost only a nickel. "Do you realize that I could have had 10 candy bars for the money that it takes you to buy only one? In other words, the price that you pay is 10 times as much as I paid!" said the teacher.

At this point the teacher passed out blank forms like the one below, saying: "I am going to take you back to one day in my life when I was a sixth-grader and tell you what I did and how much it cost me. I want you to tell me how much it would cost you today to do the same things." (Only the "Item" column was filled in.)

PRICE CHANGES

Item	1937	1982	Difference [1982 ÷ 1937]
Candy bar	$ .05	$ .50	10 TIMES
Subway ride	$ .05	$ .90	18 "
Movie	$ .10	$ 2.00	20 "
Hot dog	$ .05	$ .75	15 "
Soda	$ .05	$ .65	13 "
Ice cream cone	$ .05	$ .80	16 "
Quart of milk	$ .10	$ .70	7 "
Newspaper	$ .02	$ .25	12.5 "
Doctor (office visit)	$ 2.00	$ 40.00	20 "
Totals:	$ 2.47	$ 46.55	19 " (ROUNDED)

The students were instructed to write 5¢ at the top of the 1937 column and 50¢ under 1982; then to divide .50 by .05 and place the result in the "Difference" column. (The absolute difference of 45¢ could have been used instead.) Then the teacher recounted how he had taken the subway to the theater (5¢), and told the pupils to put .05 in the "1937" column, and the price of a subway ride today in the "1982" column. Similarly, at each step in his story, the two prices would be entered. (The 1982 price given by a majority of the

students was used.) After returning home, with the quart of milk and newspaper that his mother had instructed him to buy, he developed a stomach ache because of all the "junk food" he had eaten. Thus, the visit to the doctor, and the $2.00 fee that the pupils found to be mind-boggling. The children were told to add up the 1937 and 1982 columns and to see how much it would cost them today to do everything the teacher had done in 1937. The students were told to compute the percentage difference for the last column, and the one who obtained the correct answer (rounded off) first was rewarded with the candy bar. It was then explained that when the prices of nearly all goods and services rise, we have inflation and that the purchasing power of the dollar has fallen. (It must be noted, however, that incomes have increased also.)

The students were asked to give examples of price increases that they have witnessed in their life-times, and to show how they have been affected by them.

[An assignment that could be used with this lesson is to give the students a blank "Price Changes" form and let them fill in some goods and services that they often use themselves, with the prices that they normally pay. Then they can ask their parents or grandparents to tell them the prices they paid when they were sixth-graders. You might even be able to give the students the basic idea of a price index, if they are able to calculate the percentage increases in prices. Old newspapers, magazines, and catalogs can arouse interest by showing what prices were like in the past. The example below was found in a 1958 New York newspaper.]

9.95 to 14.95 MEN'S SPRING & SUMMER SHOES

LEATHER UPPERS OR COMBINATIONS WITH SILK OR NYLON MESH

Here's a special purchase of those cool and comfortable quality summer shoes you men really go for! It makes no difference if you're hard to please—we have what you want! You can choose from all the leather styles, including woven leather and silk & leather, and also from nylon mesh combinations. We have Wing tips, Custom toes, Mocs, Slip-on and loafer types, in Black, Brown, Tan, Navy, and Summer White. Sizes 6 to 12 in the group. Sorry, no mail or phone.

$5

After the students had learned the meaning of inflation and how they are personally affected by it, the teacher turned to the causes of inflation. Telling the students that they were going to be "paid" for their hard work, he gave each child $10 in play money. Then he took a small portable radio from his briefcase

and proceeded to "auction it off." Only the play money was to be accepted in this mock auction. The bids quickly rose to $10. At this point he wrote $10 on the chalkboard and said: "Oh, I made a mistake, I should have given you each $20." Each child then received an additional $10 in play money, and the bidding resumed. In less than a minute, the bids reached $20. "Look," said the teacher, "a few minutes ago the price of the radio was $10, but now it is $20. What caused the price to rise?" After a few moments of silence, the students accused the teacher of raising the price. He denied the charge, pointing out that he had never quoted a price. Finally, the students began to see that if the money supply increases, while the supply of goods remains constant, the price will rise. In the ensuing discussion, other possible causes were brought out -- there was a very big demand for the product; the supply was limited (indeed, in that period the teacher had a monopoly on radios); there was no competition, etc. The lesson ended with a brief discussion of how consumers might protect themselves from inflation.

¶ If you are using computers in your teaching, consider the following software, all available from Social Studies School Service, P.O. Box 802, Culver City, Calif. 90232-0802.

Electronic Money, a simulation on banking for grades 6 and up. Includes budgeting, money management, checking and savings accounts, charge cards, and electronic transactions. Available on Apple, Commodore 64, and IBM diskettes, with backup and guide. Price: $29.00.

Run for the Money, for grades 4 and up, asks students to make economic decisions, such as pricing products they have made. Available on Apple, Macintosh, and IBM PC diskettes, with guides. Prices: $29.95 for Apple and IBM; $19.95 for Macintosh.

Credit and Banking examines banking as a business, the various forms of money, credit, savings and checking accounts, and interest. Available on 2 Apple diskettes, or as 2 filmstrips with 2 cassettes and guides. Prices: $109.95 for diskettes; $79.95 for filmstrips.

¶ Several worktexts are available from Social Studies School Service, P.O. Box 802, Culver City, Calif. 90232-0802.

Money Matters by Benjamin Piltch and Peter Smergut, deals with budgeting, checking and savings accounts, credit, and taxes. Reading level: Grades 5 & 6. Price: $3.95 per copy; $3.55 if you order 5 or more.

You and Your Money by C. Crowell and D. Mosenfelder, covers personal budgets, banking, credit, and loans. Teacher's guide included. For students with low reading levels. Price: $5.25 per copy; $3.80 each if you order 10 or more.

Make Your Money Grow: A Guide to Savings Plans by Martha Beshers, covers interest rates, deposits, withdrawals, bank forms, and how to read bank statements. Low reading level (grade 3). Price: $3.95.

Pay by Check by Janis F. Chan, deals with opening and maintaining a checking account. Low reading level (grade 3). Price: $3.95.

¶ For children who can deal with material intended for grades above the sixth, consider the following:

Banking. Set of 50 spirit masters or worksheets with guide, covering the services offered by financial institutions, interest rates, loans, checks, bank statements, etc. Available from Social Studies School Service, P.O. Box 802, Culver City, Calif. 90232-0802. Price: $19.95.

Money and Banking by Lois Cantwell. A short book (66 pages) on the history of money, banking, credit, and the Federal Reserve. Published by Franklin Watts, 1984. Price: Approx. $9.90.

The Story of Inflation, a comic book published by the Federal Reserve Bank of New York, Public Information Dept., 33 Liberty St., New York, N.Y. 10045.

Pink Pebbles, a game published by Cardinal Printers, Inc., Wesleyan University, Middletown, Conn. 06457. Deals with money in a market economy.

¶ If you are studying other countries or regions of the world; have the students find out what sort of currency is used there. What is the monetary unit of another nation? How does it compare in value with the U.S. dollar? Does the other nation suffer from inflation? Ask the pupils to plan a trip to another country that interests them. What should they know about the currency of that nation?

Economic Growth and Development

Although economic growth and development often go hand in hand, they are not exactly the same. Growth means that a nation is producing more goods and services than before, and that the nation's output per capita (per person) is increasing. Development, on the other hand, means that the nation is moving to a higher level of technology, or a more sophisticated and complex economy. The term primary producer is often used to describe a nation or region that relies mainly on extractive industries such as farming, fishing, mining, and lumbering. A secondary producer is a manufacturing nation or region; and a tertiary producer has an economy that is service-oriented. (Although extractive industries and manufacturing are very important in the United States, more workers are engaged in producing services.) Thus, a nation that continues to produce the same types of goods as before, and in the same ways, may be growing but not developing. The term developing nation is often used to describe a country that is moving from a relatively primitive economy to one that includes more manufacturing and higher levels of technology. An understanding of these terms and concepts can give students some of the analytical tools that will enable them to study other nations more intelligently.

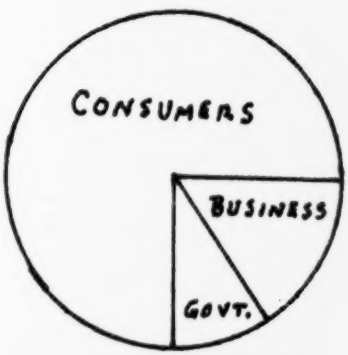
Some factors that are conducive to economic growth and development are:

§ A well-trained, well-educated, healthy and highly motivated labor force.
§ Entrepreneurial spirit, such as willingness to take risks.
§ Encouragement for invention and innovation.
§ A substantial amount of economic freedom.

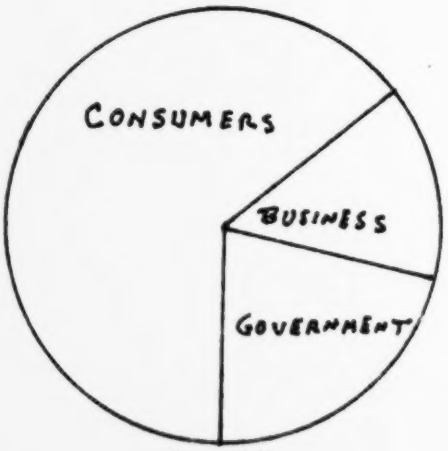
§ An adequate infrastructure (roads, bridges, ports, etc.).
§ An adequate rate of savings and investment. (People must be willing to sacrifice consumption today in the hope of higher returns in the future.)
§ A high rate of capital formation. (Devoting a substantial portion of the nation's total output to providing new factories, machines, tools, equipment, and the like.)
§ A sound banking system.
§ A flexible money supply. (The supply of money must grow to meet the needs of a growing population and business growth.)
§ A relatively stable monetary unit (no serious inflation).
§ Broadly based markets. (Reliance on one or a few markets is dangerous, if those markets should collapse.)
§ Good distribution of income. (Great extremes of wealth and poverty can weaken a nation's economy and cause political unrest.)
§ A good supply of natural resources.
§ Political stability.

It should be possible to express many of these ideas in terms that intermediate students can understand. Some ideas for teaching about economic growth and development follow.

¶ Introduce the class to the pie chart and to the idea that our economic output is like a huge pie made up of all the goods and services that we have produced in a year. Point out that this is called our GNP, or gross national product. (Perhaps you can jokingly refer to it as our "great national pie.") Explain that when students or anyone else produce goods and services and sell them they are contributing to this pie. When they use goods and services, they are consuming a piece of the pie. The pie charts below represent our GNP for two different years. What is the significance of the fact that one is larger? (Our economy produced more goods and services in the second year, so the pie became larger.) What does this mean to you personally? (You might be able to get a larger "piece of the pie" -- to have more goods and services than before.) Suppose you drew pie charts for the United States and for some other nations. Would the charts for the other nations be larger or smaller than that of the United States? (Smaller, because they produce less than we do.)



Former year GNP

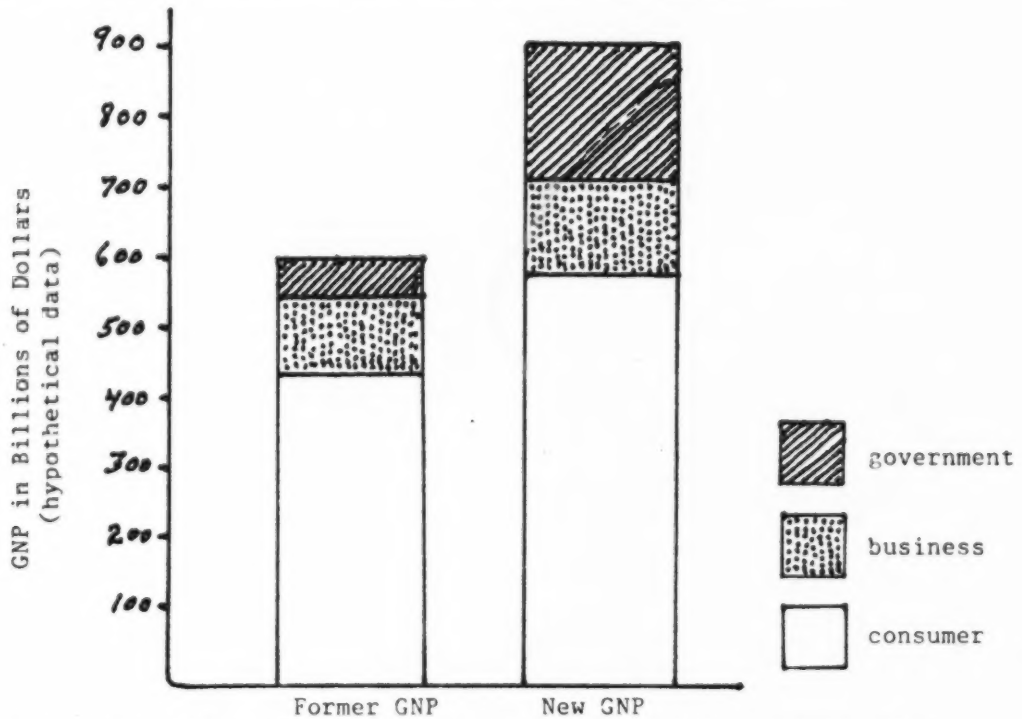


New GNP

Students will easily see that the economy has grown, because the New GNP ("pie") is bigger than the old one. It may be more difficult for them to understand the segments, and the changes that have taken place in this hypothetical example. The graphs show that consumers received about 75% of the GNP in the former year, but only about 65% in the latter. Government's share increased in the new year, partially at the expense of consumers and partially at the expense of business.

You might have the class make a large poster showing the GNP. The circle for a typical recent year would show consumers getting about 65%; business about 15%; and government about 20% (much like the situation shown in the "New GNP" chart). The pupils could paste pictures of typical consumer purchases on the largest segment; of machines, tools, trucks, and factories on the business segment; and of military items, postal workers, police, or other government workers on the government segment.

If you are teaching the children to use graphs, you can show the same information on different types, such as the bar graphs below.



The larger bar shows an increase in the nation's total output. The diagonal shading shows that government's share in relation to the share of business increased. If the segments of the pie graphs and the bar graphs are too confusing for the students, they can be omitted.

(A good reference work for your own use and for bright students is Interpreting Graphs and Tables by Peter H. Selby. New York: John Wiley & Sons, 1976.)

¶ Divide the class into small groups and have each group study one of the developing nations. They should learn as much as possible about the economy of the nation and then pretend to be a group of economists who are advising the leaders of that country on how to promote growth and development. Each group can make a brief presentation to the class, describing the economic situation of its assigned nation and explaining the advice that they have given.

¶ For a challenging simulation, have the students pretend that they have been shipwrecked on a large uninhabited island. The island has a fairly good supply of natural resources, and the students have managed to save some tools and equipment from the wreck. Now they must decide how to create a viable economy. How will they make use of their existing resources and try to create new resources (such as new tools) to bring about growth and development?

¶ Have individuals or small groups of students study people, inventions, and events that made major contributions to America's growth and development. Consider assignments to study such people as Eli Whitney, Henry Ford, Thomas Edison, Andrew Carnegie, and the Wright brothers; such inventions as the telegraph, the telephone, the electric light, the automobile, and the computer; and such events as the opening of the West and the start of the space age. The pupils should learn how each person, invention, or event helped our economy to grow and develop, and how their own lives have been affected. A good source, aside from the encyclopedia, is Roger Burlingame's Machines that Built America (New York: Harcourt Brace.)

¶ To demonstrate the importance of technological developments, conduct a simple experiment in the classroom. Establish two competing groups -- one made up of students who have hand calculators, and one of students who do not have calculators. Present the groups with some mathematical problems and give them a limited time to work on them. Students who are not in either group can help keep time, check the results for accuracy, etc. Of course, the group with calculators will solve more problems and will probably have fewer errors. Explain that the development of the calculator has increased their productivity as mathematicians. Ask the class to identify other recent technological developments that have incresed productivity, and discuss ways in which these developments are changing our economy.

¶ Study the plight of poor nations that are facing various crises. Look for recent news items, such as the report in February of 1987 that over 400,000 people in Mozambique are facing starvation. Raise the question of whether or not the United States should aid the poor nations. In addition to the humanitarian considerations, discuss the economic implications. What are the arguments for and against such aid? What will aid cost the United States? Who will pay? What benefits might the U.S. derive from giving aid? (By helping others become economically strong we can be creating markets for our goods and services, for example.) How can the poor nations help themselves? Should the class try to help? (Some classes use the profits from their classroom businesses to help the children of poor countries.)

¶ Many audio-visual materials that can be used to teach about economic growth and development are available. All of the following can be obtained from Social Studies School Service,P.O. Box 802, Culver City, Calif.: 90232-0802. (Some non-audio-visual materials are listed also.)

Industrial Era. Thirty reproducible pages of puzzles, games and exercises. (Grades 5 and up.)

Movin' On. A 58-minute film on the effect of the railroads on the U.S. Available on BETA, VHS, and 3/4" videocassette. Prices: $85 and $95.

The Lions of Capitalism. A 55-minute film on such industrialists and financial leaders as J.P. Morgan, Andrew Carnegie Ford, and their impact on our economy. On BETA and VHS videocassettes. Prices: $26.95.

Inventions that Made America. Two filmstrips, with cassette and guide. Price: $30.00.

Industrial Revolution in America. Six filmstrips with six cassettes and guide. Price: $133.00.

Industrial America. Three filmstrips with three cassettes and guide. Deals with the development of our factory economy in the late 19th century. Price: $139.00.

U.S. Economic History. Two filmstrips with cassette and guide. Price: $51.

The Origins of America's Economy. Filmstrip with cassette and guide. Price: $25.00.

Economic Backgrounds in U.S. History. Ten spirit/photocopy masters on U.S. economic development from colonial days to the New Deal. Price: $6.75.

American Economy Map Game. (Grades 4 and up.) America's resources and industries. Includes tests and teacher's guide. Up to 30 players can participate. Price: $18.00.

The Industrial Revolution. A 37-minute program on two filmstrips or VHS videotape, with cassettes (audio) and guide. Prices: $97 for the filmstrips and cassettes; $104 for the videotape.

Inventions and Discoveries. (Grades 4 and up.) 24 wall charts, showing technological developments. Price: $29.75.

The Industrial Revolution: Charts. 23 pictorial charts with notes on agriculture, transportation, textiles, iron and steel. Price: $34.50.

Explosion: A Simulation of a Society's Struggle to Solve Its Population Problems, 1980-2015. (Grades 6 and up.) Could be used to show the effects of population on industrial development. Price: $38.00.

Simulations for a Global Perspective. (Grades 4 and up.) Reproducible activity book (40 pages), covering such topics as resources and growth. Prices: $7.00 each; or $5.60 each if 10 or more copies are ordered.

¶ Study the economic growth and development in your own community. Data can be obtained from local newspapers, some large firms and banks in the area, regional or local development boards, etc. Is the area growing economically? What is the evidence? Is it developing? (For example, is farming being replaced by manufacturing?) Have the pupils take note of signs of economic change or growth as they travel through the area.

International Economics

We are all part of a complex world economy. International trade has increased tremendously since World War II, the nations of the world have become more and more interdependent, and the U.S. economy is becoming increasingly internationalized. Note the following:

- Foreign trade is accounting for an increasingly larger share of the U.S. GNP.
- Between five and six million U.S. jobs depend upon foreign trade.
- Many U.S. firms have become multi-nationals.
- Some major U.S. firms have established joint ventures with foreign companies. (Our large automobile manufacturers, for example.)
- The U.S.is facing more intense competition from abroad.
- The U.S. dollar has become a kind of world currency.
- Foreigners are accounting for an increasing share of the U.S. public debt. That is, they are lending money to the U.S. government.
- Major foreign firms are establishing plants in the U.S., and some are obtaining control over U.S. corporations.

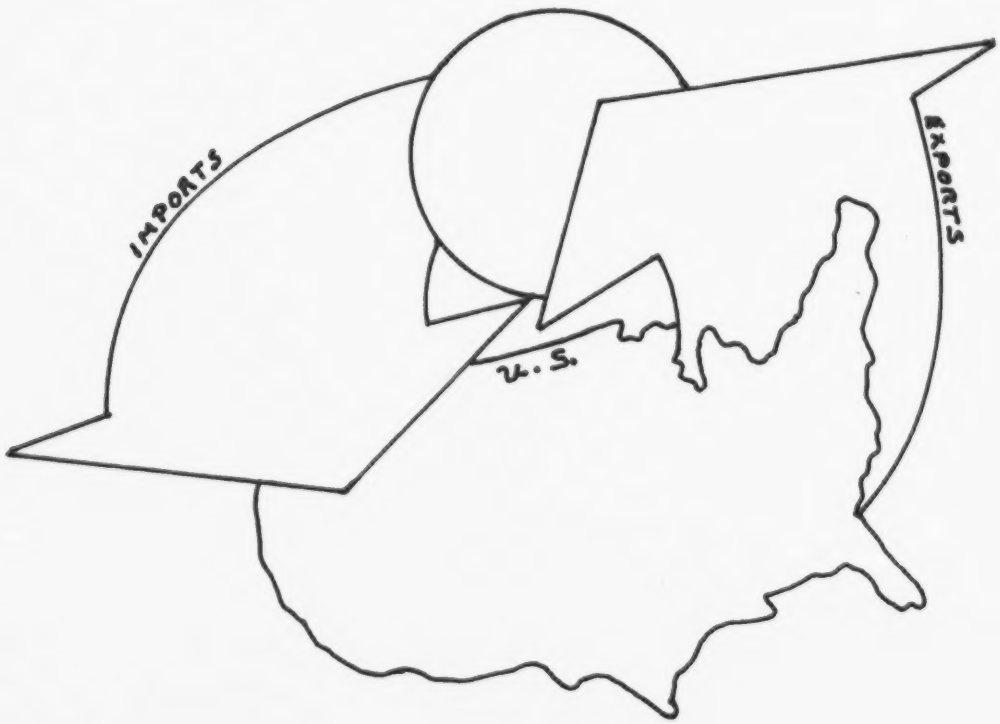
Many of the economic concepts discussed earlier -- specialization, division of labor, and interdependence, for example -- apply to the international scene as well. Our economic relationships with other countries are critically important to our own well-being.

¶ Ask the children to identify the products we use that are obtained from foreign countries. Some obvious examples are bananas, tea, coffee, Japanese cars, and VCRs. An interesting assignment would be to have them list the things in their own homes that are foreign-made. Develop a comprehensive list of the foreign goods that we commonly use in our everyday lives and discuss the ways in which we depend upon other nations to meet many of our needs and wants.

¶ Divide the students into three groups for a simulation on trade. Each group will become an island nation, which can be identifed by a number, color, or name. (You might let each group decide on a name for its "nation.") Give each group a list of the resources that it possesses, being sure that each "nation" has resources that the other two lack. For example, one might have good farm land, trees, and an ample supply of water, but no minerals. A second might have minerals and stone quarries, but no good farmland. The third might have good fishing grounds off its shores, but poor farmland and few minerals. Have the groups meet separately to discuss their needs. Each should make a list of the things it can obtain from the other "nations" to meet the needs of its people. The groups can then begin to negotiate trade agreements. For example, the farming "nation" can offer its surplus crops to the mining "nation" so that it can obtain minerals with which to make tools. The nation of fisherfolk can offer fish to the other two in return for the wood and metal it needs to build fishing boats. Make a large poster with the three island nations appearing on it in a triangular configuration. As trade agreements are made, draw arrows from one "nation" to the others, labelled with the goods being exported or imported. Ask each group to report on how its economy and the level of living of its people has changed as a result of trade. Ask them to

identify the types of business and jobs that will be created because of increased trade. For example, a shipping industry will develop to carry the goods, there will be jobs for sailors, containers will have to be built for carrying the goods, accountant will be needed to keep records of the exchanges, etc. You can use a number of "thought questions" to summarize the experience, such as: "How did you decide how much iron ore should be traded for a specific amount of farm crops?" "Since the island of farmers and the island of fisherfolk both produce food items, did they compete with one another for the goods produced by the mineral island?" (This is a brief adaptation of a project suggested by Eileen Kalb in her article "Teaching Activities 5-6: Islands of Trade," The Elementary Economist, Vol. 6, No. 3, pp. 10-12.)

¶ To help students learn the importance of imports and exports to the United States, duplicate the diagram below and distribute copies. The circle can represent the rest of the world; the map represents the United States. Ask the pupils to find out what our major exports are to the rest of the world, and what our major imports are. They can write these items on the large arrows labelled "imports" and "exports." The same diagram can be used in studying our trade with one other nation, such as Canada, or with another region, such as Latin America. (The diagram is adapted from a diagram, Fig. 18-1, in the text Introductory Economics, 6th ed., by Sanford Gordon and George Dawson; Lexington, Mass.: D.C. Heath, 1987, p. 431.)



¶ Consider using the activity book Introduction to International Trade, which has 64 reproducible pages, showing why nations trade. (Some of the activities may be too advanced for intermediate level pupils.) Available from Social Studies School Service, P.O. Box 802, Culver City, Calif. 90232-0802, for $7.50. Also available from the same source is the book Teaching About Global Awareness with Simulations and Games, priced at $21.95 per copy. This contains activities for grades 6 and up.

¶ Make a study of your own area (town, city, county, state, or region) to learn how it is affected by international trade. Which businesses sell some of their goods or services to other nations? Which ones rely upon the products of foreign nations in some way? Are any of the students' parents involved in international trade, directly or indirectly? (Data might be obtained from large business firms, large banks, chambers of commerce, business associations, regional planning agencies, and state departments of commerce.) [Note for Long Island teachers: The Nassau-Suffolk region exports $4 billion worth of goods to foreign countries a year.]

¶ Obtain copies of the comic book The Story of Foreign Trade and Exchange from the Federal Reserve Bank of New York, Public Information Dept., 33 Liberty St., New York, N.Y. The book could be used as a homework assignment, or it could be read aloud in class. The latter approach might be the better one, because it will enable you to explain any terms or concepts that the children find difficult. Note that the Federal Reserve also has two filmstrips with two seven-minute audio cassettes that can be used in conjunction with the comic book. These are part of a multi-media package that also includes four spirit-duplicating masters, a primer for the teacher, and a teacher's guide. The price of the entire multi-media package is $31.50.

¶ The students should learn that other countries have currencies that are different from our own, even if they call their money "dollars" as in the case of Australia and Canada. Ask the class if anyone has seen foreign money; and perhaps some pupils can bring in examples of foreign money that members of their family obtained through travel. Note that one must change U.S. dollars to foreign currency when traveling in foreign countries, although U.S. dollars are accepted in some places. Thus, one needs to know what the foreign currency is worth in relation to the U.S. dollar. Exchange rates are published daily in the New York Times, and major banks can provide up-to-date information on exchange rates. When studying any foreign country, you might include that country's currency and recent exchange rates in your lessons. Perhaps the class can develop "conversion tables" showing the rates, as in the following simple example:

Foreign currency		Value in U.S. money*
Canadian dollar	=	$0.75
British pound	=	$1.53
French franc	=	$0.16
Swiss franc	=	$0.65
W. German mark	=	$0.55

*[As of Feb. 20, 1987, rounded to the nearest cent.]

The table can also be set up to show the value of the dollar in terms of each currency, as follows:

U.S. Dollar's Value in Foreign Money

1.50 Australian dollars
12.83 Austrian schillings
.65 British pounds
1.33 Canadian dollars
13.05 Indian rupees

You might ask the students to do some simple computations, such as showing how much U.S. money 10 Canadian dollars would bring ($7.50), or how many Canadian dollars you could get with 100 U.S. dollars (133). (For a more detailed discussion of teaching this subject in the elementary grades, see Jacquelene Dickinson's article "It's A Small World" in The Elementary Economist, Vol. 6, No. 3, pp. 8-9.)

It should be understood that exchange rates can vary, even during a period of one day. For example, if foreigners want to buy more U.S. goods or invest their money in American securities, they will offer more of their own money for each U.S. dollar -- Austrians might give 14 schillings instead of only 12.83 for a U.S. dollar. (What do Americans do with the foreign money? They can use it to buy goods from that country, to invest in the securities of that country, or to spend when they travel there as tourists. They can sell their foreign currencies to others. Large banks will usually sell foreign money to Americans who need it for any of these purposes.)

¶ The film "Return to Mocha", which was suggested for use in teaching about different economic systems, can also be used to teach about trade. The three fictional island-nations in the film improve their standards of living and meet more of their needs and wants by trading with one another, even though their political and social systems are different. Students should enjoy the film, which employs rock music and cartoon characters. (To borrow the film, write Video Outreach, c/o JN Company, Box 1199, Melville, N.Y. 11747. It is available in ½-inch VHS and in 3/4-inch video-tape.)

¶ Relate international economics to U.S. history by asking the class to recall the reasons for the American Revolution. In addition to "taxation without representation," the pupils should remember that the British tried to disrupt the profitable trade that was so important to the colonists. The War of 1812 was also caused, in part, by interference with our trade. Be alert for recent news items about current situations in which trade barriers have caused ill-feelings among nations. (For instance, relations between the U.S. and Canada became strained in 1986 after the U.S. imposed tariffs -- import taxes -- on some Canadian products.) Discuss the pros and cons of trade barriers. This could also lead to a lesson on international organizations such as the International Monetary Fund, the World Bank, the General Agreement of Tariffs and Trade, and the Common Market. Note that some of the same factors that caused the American states to adopt the Constitution and break down the trade barriers among states also caused the European nations to form the Common Market (sometimes called "The United States of Europe").

Economic Problems

Many teachers use the problem-solving approach in teaching economics. In its simplest form, the problem-solving approach involves these steps:

(1) Identify and define the problem. What is the problem? Who is affected by it? What is it costing us? (Be sure to consider all real costs, not only money.)
(2) Gather relevant facts about the problem. What is causing it?
(3) Consider alternative solutions.
(4) Analyze each alternative in terms of the benefits and costs.
(5) Decide on a solution and try to implement it.

Some of the economic problems that will be mentioned in this section can be related to the topics discussed earlier, and thus could be incorporated into other lessons. Some of the problems could become the subjects of separate lessons or even of whole units. All of these problems call for the use of the analytical principles of economics, such as opportunity cost and trade-offs. A few concepts that have not been discussed earlier can be taught in relation to these problems. You will not have difficulty in finding current problems -- any recent newspaper (including a local paper) or news magazine will contain items on economic issues. Students can be asked to identify problems and to bring in the articles on a continuing basis. The best approach is then to show how the students are personally affected by the problems. A few ideas follow.

¶ The problem of pollution usually interests students. No one wants to drink contaminated water, breathe foul air, confront solid waste, or be annoyed by noise pollution. Dramatic news items of oil spills, illnesses caused by toxic waste, acid rain, thermal inversions, etc., can be used to initiate a lesson or unit. Ask the students to try to identify examples of pollution in the area, and to explain how they have been affected by it. Then introduce the concept of externality (also called "spillover"). An externality is a cost or benefit experienced by a third party -- someone who was not involved in the market situation. For example, Mr. Burns buys a noisy lawn mower. Mr. Burns and the seller of lawn mowers benefit from this market transaction. But Mrs. Clark, a neighbor, is annoyed by the noisy lawn mower, so she is bearing part of the real cost although she was not involved in the market transaction. This is an external effect or spillover. Some externalities are positive, however. If Ms. Ames plants flowers in her yard, and her neighbors enjoy seeing the flowers, the neighbors are getting some of the benefits although they did not pay any of the costs. Present the class with a number of situations relating to some form of pollution (air, water, noise, solid waste) and ask them to identify the costs and benefits. The list might include such things as a factory that provides jobs for people in the area and produces a product that many people want, but that may be polluting the air and water; a person smoking in a room full of non-smokers; a boy playing a portable radio with the volume turned up; a man spraying his trees with a poisonous substance; children leaving trash in a public park or on the beach (or in the school playground!); and the like. Some heated debates might

develop during the discussions, as people often differ on what is positive and what is negative. (For a more detailed discussion of teaching about externalities, see "Externalities" in The Elementary Economist, Vol. 3, No. 4; pp. 6-8 for grades 5 and 6.)

After studying pollution in your area, have a mock hearing in which some pupils play the roles of city council members (or other public officials), while others represent various groups who either gain or lose from a problem situation. (Environmentalists will want to close down a paper mill that is polluting a river, but the union will oppose this move because workers will lose jobs.)

Ask students to interpret the cartoon (taken from the text Introductory Economics by Sanford Gordon and George Dawson). What trade-off does it imply? What does it show about the problems faced by public policy makers when they try to deal with pollution? What would the students be willing to give up to have less pollution?

¶ Conservation is a topic closely related to the pollution problem, because poor conservation has helped to cause pollution. In view of the fact that some resources are non-renewable, and thus will become increasingly scarce, conservation is one way of dealing with the problem of resource shortages. The way in which energy conservation helped to reduce fuel prices is a dramatic example of its importance. Have the students identify the natural resources in your area, including wild life. Perhaps they could make posters or bulletin board displays on "Our Natural Resources". Ask them to explain how they are personally affected by each resource. What goods and services do they use that come from these resources? What will happen to the prices of these things as the resources become scarcer? Here you might even introduce

the concept of elasticity. In very general terms, a product is elastic in supply if the supply can be increased easily; it is inelastic if it is difficult or impossible to increase the supply. If the demand rises sharply so that the price goes up, say by 100%, but the quantity of the item being offered for sale goes up by less than 100% (say by only 10%), then supply is inelastic. The supply of some natural resources is perfectly inelastic, meaning that nature provided a fixed supply (as in the case of certain minerals) and humans cannot increase that supply. These are non-renewable resources. Some resources are renewable, such as timber, grass, and fish. In any event, whenever we increase our demand for a resource that is inelastic in supply, we can expect the price to rise.

Nearly every community has problems of resource scarcity, with many controversies surrounding the utilization of its resources. These situations can be studied in class. For example, on Long Island there is a controversy over the issue of preserving farmlands. Some want the land to be used for housing and industrial development; others want it to remain in agriculture, even though housing is badly needed and farming is less profitable. Students can study the trade-offs in such situations, determine who would benefit by each alternative, who would bear the costs, and so on. (One Long Island town has been attempting to halt industrial development. Although more industry would mean more jobs and higher incomes, the town fears that it would put a strain on the water supply, create traffic jams, and pollute the air. The trade-offs here are quite obvious.)

The filmstrips Natural Resources deal with America's resources and with disagreements over their future use. The two filmstrips, with two cassettes and a teacher's guide, are available from Social Studies School Service, P.O. Box 802, Culver City, Calif. 90232-0802. Price: $82.00.

¶ "Report Warns of Oil Crisis in 1990's." This headline appeared in The New York Times on Feb. 23, 1987. The article suggests that the energy crises of the 1970s will return. Thus, the students who are now in 5th and 6th grade classes may face gasoline lines and soaring fuel prices when they finish school. You might introduce the topic by asking the pupils to write down all the ways in which they personally use energy. Lists can also be made of energy use in the home, the school, the community, in businesses, and on farms. Identify the various forms and sources of energy.

Have the students write stories on: "What my life would be like if we had no electricity and no fuel." (Students on Long Island might remember the power failures that were caused by Hurricane Gloria in 1985, leaving some areas without electricity for several days.) This should dramatize the importance of energy in our lives.

Ask students to interview their parents or grandparents to learn about the energy crises of the 1970s. How were they affected? What happened to the price of gasoline? To home heating fuel? How was the economy as a whole affected? (Practically all prices rose, because energy is required to produce anything. Thousands of gasoline stations closed down, unemployment increased, and the nation went into a recession.) What did people try to do about the problem?

Ask students to write papers on: "How my own demand for energy will increase when I am an adult." (They will be buying gasoline and oil for motor vehicles, buying home heating fuel, using energy in any business they might own or work for, etc.)

Hold a class discussion on the question: "If we need more energy, what would you be willing to give up in order to get more energy? What would you be willing to sacrifice to conserve energy?" Here you can remind the class of the real cost principle and trade-offs. Would they be willing to walk to school instead of coming in a bus or car? Would they wear heavy sweaters instead of having the heat turned up high? Would they cut back on their use of electric appliances? After discussing the sacrifices on this personal level, move to the national or international scene. For the nation as a whole, what would be the real costs of increasing our energy supplies? For example, we could mine more coal, but coal causes pollution and is damaging to the health of mine workers. We could import more oil, thus risking more oil spills and going into debt to foreign oil producers.

Make a large poster on the different types of energy sources and the advantages and disadvantages of each. The sources (coal, solar, nuclear, petroleum, etc.) can be listed in a left-hand column, with columns for "advantages" and "disadvantages" to the right. For example, solar energy is unlimited (as long as the sun keeps shining!) but it is expensive to develop the technology to use it efficiently.

The concept of elasticity is important in studying energy. The demand for energy tends to be highly inelastic. If the price rises by 100% we can't reduce our consumption of energy by 100%. The percentage drop in consumption (say 10%) will be much less than the percentage rise in price -- an inelastic demand situation. Supply is also relatively inelastic. A sharp increase in energy prices may bring forth only a small increase in the quantity of energy available for sale. All of this translates into higher prices for consumers and businesses. To convey the idea to children you might ask: "Suppose your fuel company doubles the price of a gallon of home heating oil -- a 100% increase -- how far could you cut back on your use of fuel?" (If a pupil answers that the thermostat could be set at 65 instead of 70, point out that this is only about a 7% reduction.)

Perhaps the study of energy could be culminated with the development of a plan to conserve energy and to prepare for the shortages that are being predicted for the future.

For additional ideas for teaching about energy, see:

The Economics of Energy: A Teaching Kit, available from the Joint Council on Economic Education (2 Park Ave., N.Y., N.Y. 10016) for $5.50. This is aimed at secondary levels (grades 7 and up) but could be modified for use with 5th and 6th graders.

Energy Conservation Education: An Action Approach Grades 4-9, produced by the Council on the Environment of New York City and the New York State Energy Office, Albany, N.Y. 12223.

Energy Films and Publications, N.Y. State Energy Research and Development Authority, Dept. of Communications, Two Rockefeller Plaza, Albany, N.Y. 12223. Phone: (518) 465-6251.

A Conceptual Framework for Energy Education, K-12. National Technical Information Service, U.S. Dept. of Commerce, Springfield, Va. 22161.

Aunt Energina Program (K-6). McDonald's Corp., Dir. of Corporate Responsibility, One McDonald's Plaza, Oak Brook, Ill. 60521. Filmstrip with teaching guide.

Ecology and Energy Action Pack (Grades 4-6). McDonald's Corp., Dir. of Corporate Responsibility, One McDonald's Plaza, Oak Brook, Ill.

The Energy Crisis. (Grades 4-6) Teaching unit; map; graphs; and chart. AMOCO Educational Services, Public Affairs, MC-3705, P.O. Box 5910-A, Chicago, Ill. 60680.

The Energy Dome. (Grades 4-6) Teaching unit.
The Energy Challenge.(Grades 5-8) Teaching unit. Both from U.S. Dept. of Energy, Technical Information Office, P.O. Box 62, Oak Ridge, Tenn. 37830.

Energy/Ecology/Economics. (Grades 1-8) Teaching unit. Sears Roebuck & Co., Consumer Info. Services, D-703, Sears Tower, Chicago, Ill. 60684.

Energy Education Curriculum Project (K-12). Indiana Dept. of Public Instruction, 220 State House, Indianapolis, Ind. 45204.

Energy Tradeoffs in the Marketplace by Kenneth Leonard, et. al., Washington Council on Economic Education and Washington State Dept. of Public Instruction, 7510 Armstrong St., S.W., Tumwater, Washington 98504. (Not aimed at elementary students, but ideas can be adapted for upper elementary level.) [New York teachers: Contact your DEEP Coordinator, local Center for Economic Education, or State Council on Economic Education to obtain a copy.]

New York Energy Project Teacher's Guide. Energy Education Project, N.Y. State Education Dept., 314D, Albany, N.Y. 12234.

Wide World of Energy Multimedia Kit. Filmstrip, 18 study prints, energy game, 10 different energy activity cards, 30 comic books ("Mickey Mouse and Goofy Explore Energy"), teacher's guide. Walt Disney Educational Media Co., 500 So. Buena Vista St., Burbank, California 91521. Price: $119 per kit.

¶ Labor and employment are topics that should interest all children. Begin with a discussion of the occupations that the students hope to pursue, giving each child a chance to tell what he or she wants to do as an adult. Have each pupil develop a "Career Book" that would contain the following sections:

- What occupation do I want to pursue? Why does this appeal to me?
- What does a person in this field do? (If possible, interview people who are in this field, and include drawings or pictures to illustrate the occupation.)
- How will this occupation contribute to our economy? What goods and/or services will I be providing?
- What sort of education and training will be needed? How can I go about getting the education and training? What will it cost?

- About how much can I expect to earn in this occupation?
- What benefits, other than money, can I get from this occupation?
- Do people in this field belong to trade unions, professional societies, or business organizations? (If so, the student should try to obtain information from the relevant organization.)

Ask the students to pretend that they are looking for a job in their chosen occupation right now. Show them how to use the want ads in newspapers to locate job opportunities. They might also learn about getting jobs through employment agencies, unions, or other organizations. Try to get samples of job application forms and give them practice in filling them out. Also have them write letters of application. Have simulated job interviews in which the pupils act as people applying for jobs. You might serve as the interviewer, but the other students should be asked to comment on the positive and negative aspects of the "applicant's" performance. Perhaps a business person can visit the class and discuss the things that an employer looks for in an applicant.

Devote some time to a study of unions and the role they play in our economy. Students can interview parents who belong to unions, asking them why they are members, what the union does for them, etc. They might read some books on labor, such as The Mill Girls by Bernice Selden (New York: Atheneum, 1983). This deals with working conditions and labor relations in the late 19th century. They might read a short history of labor, such as One Hundred Years of American Labor (AFL-CIO, 815 Sixteenth St., N.W., Washington, D.C. 20006). The two filmstrips The Rise of the American Labor Movement, with 2 cassettes, spirit master, and teacher's guide, are available from Social Studies School Service, Box 802, Culver City, Calif. 90232-0802. Price is $60. To learn how wages are set and how the laws of supply and demand apply to labor, use the two filmstrips Labor. This also covers the history of unions. The price of the filmstrips (with 2 cassettes and a guide) is $79.95; the same material on two Apple diskettes, with guide, costs $109.95.

Simple simulations can help children learn about collective bargaining. The game On Strike (grades 4-6 reading level) is available from Social Studies School Service for $17.95. You could also develop your own simulations, with some children playing the roles of union workers, some acting as management, and some as consumers who are affected by the dispute. Each party could present its views. If no agreement is reached, some students might act as mediators or arbitrators.

Note: Many books on workers and occupations are listed in Learning Economics through Children's Stories, 5th ed., by Robert Hendricks et. al. (New York: Joint Council on Economic Education, 1986).

¶ Although unemployment and poverty are unpleasant subjects, they are current problems that all Americans should be aware of. Furthermore, they are serious problems in some of the other countries that the students will be studying. There are books on these subjects, even at the primary grade levels. The following could be read by 5th or 6th grade pupils who are slow readers:

My Daddy Don't Go To Work by Madeena Spray Nolan (Minneapolis: Carolrhoda Books, Inc., 1978), is a story about a family trying to cope with problems after the father is unable to find a job.

My Mother Lost Her Job Today by Judy Delton (Niles, Ill.: Albert Whitman & Co., 1981) shows how a child is affected when her mother loses her job.

Children who are good readers might read Poverty in America by Milton Meltzer (New York: William Morrow, 1986). This 122-page book is aimed at 7th graders, but some 6th graders should be able to understand its discussions of poor children, minorities living in poverty, and government programs for the poor.

Examine the situation regarding the poor and the unemployed in your own area. Even in relatively affluent areas with very low rates of unemployment (such as Long Island), there are problems relating to unemployment and poverty. Discuss the reasons why we should all be concerned about the problems, even if we ourselves are living comfortably. In addition to having compassion for the victims, we ought to be concerned because these problems affect our economy as a whole. People who are unemployed are not producing anything, and thus our GNP is lower than it could be (the "pie" that we all share is smaller than it should be). Poverty often leads to crime, ill health, and other problems that pose a threat to society as a whole. Your class might discuss possible solutions to the problems, the role that government ought to play, and what we as individuals can do. For a challenging assignment, the pupils might write papers on the question: "What can I do to be sure that I will not be unemployed." (Planning for the future, getting a good education, carefully saving and investing, etc., are some possible answers.)

The economics of discrimination is a controversial subject, but one that many teachers are including in their lessons. To give students an idea of what it is like to be a victim, some teachers will arbitrarily select certain physical characteristics and favor students who have those characteristics (blue eyes, for example). Thus, some children will be given high marks on a test because they have blue eyes, while brown-eyed children will get the low marks. It will take only a few seconds to get a heated discussion going, and you can then point out that your action reflects some of the kinds of discrimination taking place in society. Women are denied jobs that they are perfectly capable of holding, simply because they are women. Blacks, Hispanics, Asians, the elderly, and the handicapped also suffer. Newspapers often contain articles on the wage differentials and unemployment and poverty rates for minority groups. Again, it should be noted that the whole economy is harmed by discrimination. When we prevent people from producing as much as they could be producing, our GNP is smaller than it could be, and we have a smaller "pie" to share. (Economists have estimated that billions of dollars worth of output are lost each year because of discrimination.)

For a dramatic presentation on discrimination elsewhere, show the filmstrip South Africa: Economics and Politics of Apartheid (Random House, 1985). With cassette and teaching guide, this costs about $28.00. (Can be obtained from Social Studies School Service, Box 802, Culver City, Calif. 90232-0802.)

¶ Directly or indirectly, everyone is affected by crime. A study of the economics of crime will interest most students. You might start by asking if anyone in the class has been robbed or if any family member or friend has been a victim of crime. If so, discuss the various costs

involved. What was the loss to the victim? What were some of the costs to society? (The cost of sending police to investigate and to search for the criminal, for example.) Give an assignment in which the students are asked to discuss with their parents the costs to the family of trying to protect themselves from criminals -- the cost of having locks on all doors and windows, burglar alarms in homes and in cars, burglary insurance, the amount of one's tax bill that goes for police, running the courts, maintaining the prisons, etc. Add up all these estimated costs submitted by each pupil and get a total for the class as a whole. Even if the children have overlooked many of the actual costs, the total is apt to be impressive. Discuss how our society has to use some of its scarce resources to deal with crime. Which of the factors of production are used? Police officers, prison guards, court officers, and other members of our labor force are used to fight crime. Land and expensive capital goods such as court houses, jails, patrol cars, and communications equipment are used to fight crime -- all at a cost to society as a whole. (All of these resources could be used for other things, such as hospitals, schools, recreation facilities, and housing.) Give the class some of the figures on the cost of crime. For example:

- Organized crime costs our society over $18 billion a year (1986 data).
- Shoplifting costs over $24 billion a year. Thus, even relatively "petty" crimes can add up to a great loss to society.

If we add these two types of crime and divide by the population, we find that the per capita (per person) cost is well over $300 per year. Note that many other types of crime are not included. Ask the pupils: "What would you be able to buy with the $300 a year that crime is costing you?" Invite a police officer or other law enforcement specialist to speak to the class on the cost of crime, and on what we can do to protect ourselves from criminals. (For your own information, see the book The Economics of Crime by Daryl A. Hellman. New York: St. Martin's Press, 1980. This shows how to apply economic principles in studying crime, but it would not be suitable for the students.)

¶ Because we all use food and other goods produced by farms, a study of the farm problem could be interesting. You might begin by asking the students to identify all the farm products that they have used that day -- orange juice, cereal, eggs, butter, garments made of cotton or wool, etc. Try to get a master list of all the ways in which we rely upon farmers. Ask children who have visited farms to describe what they saw, and to categorize each item as one of the factors of production -- farm workers as labor; land and other natural resources; capital items, such as tractors, milking machines, barns; and the farm owner as manager or entrepreneur. Discuss the role that agriculture plays in your own state or region. (On Long Island, for example, note the growing importance of horse farms and wine grapes as well as vegetables.) Obtain a copy of the teaching kit The Big Brown Bag: Economics of the American Food System by Judith Staley Brenneke (Washington, D.C.: Food Marketing Foundation, 1981). This 64-page kit of materials was designed for use in the upper elementary grades. (The Foundation's address is: 1750 K St., N.W., Washington, D.C. 20006.) The pupils might also

get books on farming from the library. For example, Farming by Dennis B. Fradin (Chicago: Children's Press, 1983), which is suitable for grades 3-5. The role that agriculture plays in our foreign trade can be noted, and our farms can be compared with those of other countries being studied.

To introduce the farm problem, you might use The American Farmer: Hard Times, Hard Choices, a filmstrip with cassette and teacher's guide produced in 1987 by Random House Media. (Available from Social Studies School Service, Box 802, Culver City, Calif. 90232-0802. Price $28.00) In discussing the question of government aid for farmers, the class should understand the special problems and situations that farmers often face. For example, the weather may have no effect on a manufacturer, but it can "make or break" a farmer. Many manufacturers can quickly shift from one product to another in reaction to changing prices and other market conditions; but farmers who have planted a crop cannot suddenly decide to grow something else. Farmers are competing with thousands of other producers of the same item, whereas many manufacturers have only a few competitors. The demand for many farm products is highly inelastic. Thus, if farmers increase their output by 100%, sales may rise by only a very small percentage (say 5%); thus the price the farmer receives will plunge.

After getting relevant facts about the farm problem, set up a simulation in which some students play the role of a Congressional committee holding hearings on whether or not to increase (or continue) aid to farmers. Another group can represent the farmers presenting their views to the "committee;" while a third can be made up of consumers and taxpayers who fear that aid to farmers will raise the costs of agricultural goods and will increase their taxes. After the "committee" has decided what it intends to do, have the "committee" report to the whole class. Then ask each pupil to consider how he or she might be affected by the actions that the "Congress" plans to take. The trade-offs should be clear, as an action that benefits one group is apt to hurt another.

Conclusion

To bring your studies of economics to a conclusion, consider a project in which your class shares its learnings with others. You might plan an assembly program based upon a project or topic that your class found to be very interesting. For example, they might write a play based upon the problem of crime, showing how a knowledge of economics can help us understand the problem, measure its costs, and plan programs to deal with it. In studying other countries, your pupils might write skits about the culture and economies of those countries. You might keep a large detailed scrap book that records your lessons, activities, and projects. This could become a valuable resource for other teachers who want to include some economics in their lessons. Finally, consider submitting an entry in one of the annual awards programs. You could win a sum of money, and you will be sharing your creative ideas with teachers all over the country.

BIBLIOGRAPHY OF SOURCES FOR THE TEACHING OF ECONOMICS
IN THE INTERMEDIATE GRADES

Materials available from the Joint Council on Economic Education, 2 Park Ave., New York, N.Y. 10016.

Teaching Strategies: Intermediate Level (Grades 4-6) by Marilyn Kourilsky et. al. 1978. 136pp. Price: $8.50.

Using Economics in Social Studies Methods Courses by Dennis J. Weidenaar. 1982. 136pp. Price: $8.50. (Designed for college courses in social studies methods, but contains many ideas that intermediate level teachers could use.)

Economics in the School Curriculum, K-12 by Mark C. Schug, editor. 1985. Price: $9.95. (Concepts that can be taught at each grade level.)

Economic Education Experiences of Enterprising Teachers. Annually. Approx. 100 pages. Price: $2.50 per copy. (Chapter 2 contains award-winning projects at the 4th, 5th, and 6th grade levels.)

Children in the Marketplace: Lesson Plans in Economics for Grades 5-6. Forthcoming.

Learning Economics Through Children's Stories. 5th ed. by Robert Hendricks et. al. 1986. 128pp.

The Elementary Economist. Three issues a year. Subscription: $15.00. (One section devoted to practical ideas for grades 5 and 6.)

Audiovisual Materials for Teaching Economics. 3rd ed. By Charlotte T. Harter, et. al. 1980. 176pp. Price: $4.50.

A Guide to Games and Simulations for Teaching Economics. 3rd ed. By Cathy R. Wilson and Mark C. Schug. 1979. 93pp. Price: $3.00.

An Annotated Catalog of Microcomputer Software in Economics by William B. Walstad et. al. 1986. 160pp. Price: $7.00.

Choices (Grades 5-8). 1984. Microcomputer software for teaching about scarcity and opportunity costs. Price: $20.00.

Integrating Consumer and Economic Education into the School Curriculum. By Judith Staley Brenneke. 1981. 42pp. Price: $1.50.

Basic Economics Test (Grades 4-6) by John Chizmar and Ronald Halinski. 1981. Two forms of 38 items each, with 40-page examiner's manual. Prices: Set of 25 test booklets, $7.00; Examiner's Manual, $3.50.

Economics and Our Community: A Resource Unit for Grades 4, 5, and 6. By George G. Dawson, editor. 1973. 25pp. Out of print, but might be available from your Center or Council on Economic Education.

Materials from other sources.

Economics: Learning and Instruction by Lucille G. Ford (Cincinnati: South-Western Publ. Co., 1982. 200pp.) How to teach economics at various grade levels.

Economics Exchange: Teaching Economics in Elementary School, by Willard M.

Kniep (Dubuque, Iowa: Kendall/Hunt Publ. Co., 1981. 120pp.)

Beyond Simulation: The Mini-Society Approach to Economics and Other Social Sciences by Marilyn Kourilsky (Los Angeles: Educational Research Associates, 1974). How to turn your classroom into a viable economic society that mirrors the "real" world of a market economy.

Mini-Society: Experiencing Real-World Economics in the Elementary School Classroom by Marilyn Kourilsky (Reading, Mass.: Addison-Wesley, 1983. 188 pp.)

Understanding Economics: Overview for Teachers; Experiences for Students. By Marilyn Kourilsky (Reading, Mass.: Addison-Wesley, 1983. 76pp.)

Introducing Economics, rev. ed., by Joan Mullison, editor. (Boston: Federal Reserve Bank of Boston, 1981. 52pp.) Ideas for teaching economics at various grade levels.

Projects by Concept: Economic Education Awards by George Palmer and J.A. Meihsner, editors. (Normal, Ill.: National Depository for Economic Education Awards, Illinois State University, 1982. 154pp.)See pp. 1-74 for elementary grade award-winning projects.

Decisionomics: A Program for Elementary Economic Education by Dick J. Puglisi, et. al. (Tampa: University of South Florida Center for Economic Education, 1982.) Activities for grades K-6.

Creative Activities in Economics for Middle School Students by Elmer Williams, editor (Athens: University of Georgia, 1979).

Resources for Teaching Economics in the Middle School by Elmer Williams and Nancy Boone, editors (Athens: University of Georgia Center for Economic Education, 1980).

Elementary Economics: A Bibliography (Chicago: Federal Reserve Bank of Chicago, 1985).

Ideas and Activities for Integrating Economic Concepts into Elementary Classes. 1983. 39pp. Price: $2.00. American Enterprise Center, Media Center, Box 1849, Jackson, MS 39205. (Grades 4-6.)

Instructional Materials for Economic Education. 1981. 117pp. Price: $3.25. Iowa Council on Economic Education, Univ. of Iowa, Phillips Hall, Iowa City, IA 52242. (Grades 4-6)

Property, Taxes, and Government Services--Grades 5-6. Curriculum guide. 1983. 55pp. Center for Economic Education, University of Florida, 186 Norman Hall, Gainesville, FL 32611. (Also see their lesson plan kits Money--Grades 4-5, 1981, 49pp.; Scarcity--Grades 4-5, 1981, 43 pp.; and Consumer Economics: Decision-Making--Grade 5, 1981, 51 pp.)

Taxation and Government Services: A Social Studies Unit for Fifth Grade Students. 1982. 81pp. University of Akron, Center for Economic Education, College of Education, Zook Hall, Room 435, Akron, OH 44325.

You're the Boss: A Social Studies Unit for Sixth Grade Students. 1978. 81pp. University of Akron Center for Economic Education, College of Education, Zook Hall, Room 435, Akron, OH 44325.